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Current Fishery Statistics No. 7800

Fisheries of the United States, 1978

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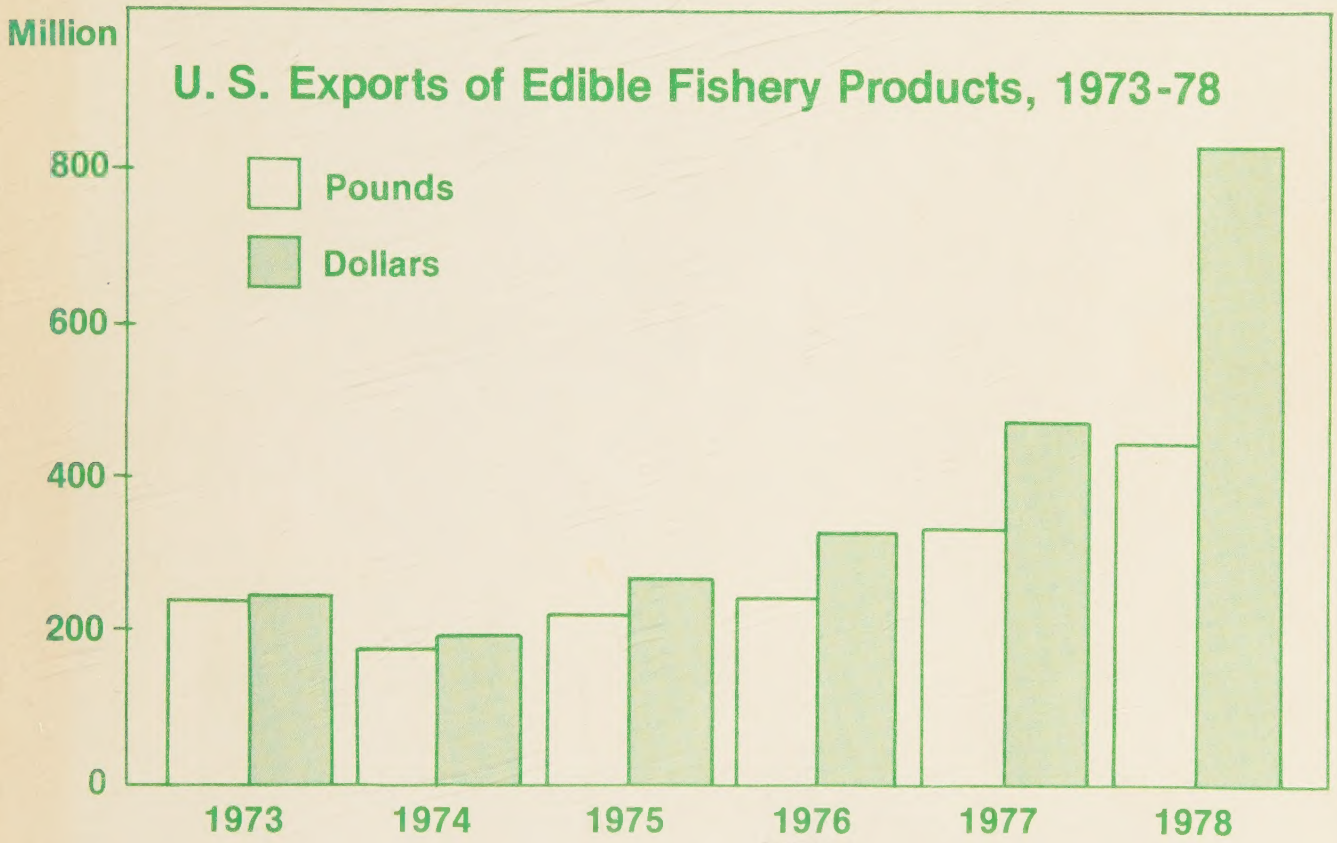

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CHART

The graph shows the quantity and value of imports of edible seafood products as reported by the U.S. Bureau of the Census.

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CURRENT FISHERY STATISTICS NO. 7800

Fisheries of the United States, 1978

PREPARED BY
RESOURCE STATISTICS DIVISION
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WASHINGTON, D.C.
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U.S. DEPARTMENT OF COMMERCE
Juanita M. Kreps, Secretary
National Oceanic and Atmospheric Administration
Richard A. Frank, Administrator
National Marine Fisheries Service
Terry L. Leitzell, Assistant Administrator for Fisheries

PREFACE

FISHERIES OF THE UNITED STATES

This is a preliminary report for 1978 on commercial and marine recreational fisheries of the United States and the foreign catches in the U.S. fishery conservation zone (FCZ). This annual report provides timely answers to frequently asked questions for the previous year. All data in this publication are consistent with the provisions of the Federal Reports Act of 1942.

MARINE RECREATIONAL FISHING

A section of this publication shows selected data from the 1970 Salt-Water Angling Survey and from other reports.

SOURCES OF DATA

Information in this report came from many sources. Regional offices of the National Marine Fisheries Service (NMFS), in cooperation with various States, compiled and collected data on U.S. commercial landings and processed fishery products. NMFS Regional Offices compiled data on the foreign catch from reports by designated foreign officials. The NMFS Washington, D.C., office of the Resource Statistics Division tabulated and prepared the data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of Defense, U.S. Department of the Interior, U.S. General Services Administration, Food and Agriculture Organization (FAO) of the United Nations, and the countries fishing in the U.S. FCZ.

Citations of notices in the Federal Register (FR) are abbreviated with the volume number followed by the first page of the notice, as follows: 42 FR 12386. Distribution of the Federal Register is made only by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

PRELIMINARY AND FINAL DATA

Data on U.S. commercial landings are preliminary for 1976, 1977, and 1978. All data on foreign catches are preliminary. Data on U.S. cold storage holdings, employment, prices, and production of processed products are preliminary for 1978. Final data on these subjects will be published in annual summaries (see section on publications, p. 96) and later in the Fishery Statistics of the United States.

UNITS OF QUANTITY AND VALUE

As in past issues of this report, the units of quantity and value are defined as follows: U.S. landings and foreign catch are shown in round weight (mollusk shells excluded) unless otherwise noted; quantities shown for U.S. imports and exports are in product weight, as reported by the U.S. Bureau of the Census, unless otherwise noted; the value of the U.S. domestic catch is exvessel (see Glossary); the value for U.S. imports is generally the market value in the foreign (exporting) country and, therefore, excludes U.S. import duties, freight charges from the foreign country to the United States, and insurance; the value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges.

SUGGESTIONS

Because the Resource Statistics Division wishes to provide the kinds of data sought by users of fishery statistics, the Division welcomes any comments or suggestions that will improve this report.

Address all comments or questions to:

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The Resource Statistics Division of NMFS takes this opportunity to thank all those States, members of industry, and foreign nations who provide the data that make reports such as this one possible.

Program leaders of the field offices were: Francis Riley and Robert H. Hall, New England, Middle Atlantic, Chesapeake, Great Lakes, and northern Mississippi River States; Richard Raulerson and Kim D. Newlin, South Atlantic, Gulf, and southern Mississippi River States; James R. Bybee, California; John K. Bishop, Oregon and Washington; Robert T.B. Iverson, Hawaii; and Janet Smoker, Alaska.

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DOMESTIC AND FOREIGN CATCHES OFF U.S. SHORES. Total catches from all areas by U.S. commercial fishermen and catches by foreign fishermen in the U.S. FCZ reached 4.6 million metric tons (10.0 billion pounds) in 1978, up 11 percent compared with 1977. This total excludes the weight of mollusk shells and estimated catches by recreational fishermen. The increase in the catch was due to a moderate increase in U.S. landings and a slight increase in the foreign catch.

All of the foreign catch (exclusive of tunas) of 1,754,000 metric tons in 1978 was caught in the U.S. FCZ. The U.S. catch (exclusive of tunas) in this zone was 641,000 metric tons in 1978, down 7 percent from 1977. The U.S. catch declined mainly because of a drop in catches in the U.S. FCZ of anchovy, a species used in making fish meal. If this species is excluded, U.S. catches in the U.S. FCZ would be 653,000 metric tons in 1978, up 8 percent compared with 1977.

U.S. COMMERCIAL LANDINGS. Commercial landings from freshwater and marine fisheries by domestic fishermen at ports in the United States were a record 6.1 billion pounds (round weight) valued at a record $1.9 billion in 1978. The quantity landed in 1978 was 16 percent more than in 1977, and the value was 22 percent more. The reason for the increase in quantity was a sharp increase in landings of menhaden for fish meal and other industrial purposes from territorial waters. This upsurge in U.S. landings together with a reported downturn in Norwegian landings probably will put the United States ahead of Norway in world landings in 1978, and into fourth place behind Japan, the U.S.S.R., and mainland China.

Commercial landings of edible species in the United States were 3.2 billion pounds valued at a record $1.7 billion in 1978, up 10 percent in quantity and 23 percent in value from 1977. The quantity of edible fish and shellfish landed was the largest since 1951. The principal reason for the increase was higher landings of tuna, salmon, cod and other groundfish, crabs, and oysters. Landings of shrimp and clams declined.

Commercial landings at U.S. ports of fish used for reduction to meal and for other industrial purposes were a record 2.9 billion pounds valued at a record $121 million in 1978, up 24 percent in quantity and 9 percent in value compared with 1977. The increase was attributed entirely to record landings of menhaden, which more than offset sharply lower landings of anchovy.

FOREIGN CATCH IN U.S. FCZ. In 1978 the foreign catch of fish (excluding tunas) and shellfish in the U.S. FCZ was 1,754,000 metric tons, up 3 percent from 1977, but several hundred thousand tons short of final allocations. The U.S. FCZ off Alaska was by far the most important, accounting for 91 percent of the total. The U.S. FCZ off Washington, Oregon, and California accounted for 6 percent, and the Atlantic FCZ for 3 percent.

About 97 percent of the 1978 foreign catch was finfish; snow (tanner) crabs and various species of squids and snails made up the remainder. Alaska pollock was by far the most important fish species, accounting for 62 percent of the total catch.

MARINE RECREATIONAL CATCH. The most recent data available are for 1970. In that year, U.S. marine recreational fishermen caught an estimate of 1.6 billion pounds of marine (saltwater) finfish, or about the same as the average amount of edible finfish landed by commercial fishermen in recent years.

WORLD LANDINGS. In 1977, the most recent year for which data are available, world landings were 73.5 million metric tons (162 billion pounds), down 2 percent compared with the record 74.7 billion pounds reported for 1976. Japan was the leading nation with 15 percent of the total. The U.S.S.R. was second with 13 percent; mainland China was third with 9 percent; Norway, fourth with 5 percent; and the United States, fifth with 4 percent.

PRICES. In 1978, U.S. exvessel prices (prices received by fishermen and vessel owners for their landings) for almost all species moved upward. The index (1967=100) for edible fish stood at 384.4 for 1978, up 12 percent from 1977. Among the exceptions to this upward trend were the exvessel prices for haddock, chum salmon, and hard blue crabs, all of which declined. The index for industrial fish was 293.6 for 1978, up less than 1 percent compared with 1977.

PROCESSED PRODUCTS. The value of domestic production of processed fishery products was $4.6 billion in 1978, 20 percent above 1977. The value of edible products increased to $4.2 billion, up 19 percent from 1977. The value of all categories of edible products increased, including fresh and frozen, canned, and cured. The value of industrial products was $481 million in 1978, up 29 percent compared with 1977. Increases in the value of both bait and canned animal food and fish meal, oil, and solubles more than offset a decrease in the value of "other" industrial products.

FOREIGN TRADE. The total value of U.S. imports of edible and nonedible fishery products was a record $3.1 billion in 1978, up 18 percent from 1977. Both edible and nonedible imports of fishery products increased. Edible imports were 2.4 billion pounds valued at $2.3 billion in 1978, up 11 percent in quantity and 9 percent in value compared with 1977. Nonedible imports were a record $824.6 million in 1978, up 52 percent from 1977.

Total U.S. domestic exports of edible and nonedible fishery products were $905.5 million in 1978, up 74 percent from 1977. Exports of both edible and nonedible products increased. Exports of edible products were 448.3 million pounds valued at $831.7 million in 1978, up 35 percent in quantity and 76 percent in value over a year earlier. Exports of nonedible products were $73.9 million in 1978, up 57 percent compared with 1977.

SUPPLY. The U.S. supply of commercial fishery products (domestic landings plus imports, round-weight equivalent) was 11.5 billion pounds in 1978, an increase of 9 percent compared with 1977. Because of near-record domestic landings of edible fish and shellfish together with record imports, the supply of edible products was a record 8.1 billion pounds. The supply of industrial products was 3.4 billion pounds, up 7 percent from 1977.

PER CAPITA CONSUMPTION. In 1978, U.S. per capita consumption of fishery products was a record 13.4 pounds of edible meat per person, up from 12.8 pounds in 1977.

REVIEW

RECORDS ESTABLISHED

U.S. COMMERCIAL LANDINGS

Volume and value of all U.S. commercial landings — 6.0 billion pounds, $1,854.5 million. . . . (previous highs, 1962 — 5.4 billion pounds, and 1977 — $1515.1 million).

Flounders — 180.7 million pounds. . . .(previous high, 1965 — 180.1 million pounds).

Menhaden — 2.6 billion pounds. . . .(previous high, 1962 — 2.3 billion pounds).

Pollock — 42.9 million pounds. . . .(previous high, 1938 — 40.7 million pounds).

Rockfishes — 59.4 million pounds. . . .(previous high, 1945 — 57.7 million pounds).

Sablefish — 29.2 million pounds. . . .(previous high, 1977 — 25.4 million pounds).

Sharks — 9.7 million pounds. . . .(previous high, 1977 — 8.2 million pounds).

Crabs, all — 449.1 million pounds. . . .(previous high, 1977 — 398.5 million pounds).

Crabs, snow (tanner)— 129.5 million pounds. . . .(previous high, 1977 — 98.3 million pounds).

Lobsters, American — 34.4 million pounds. . . .(previous high, 1970 — 34.2 million pounds).

Scallops, total — 33.3 million pounds of meats. . . .(previous high, 1961 — 29.2 million pounds).

Scallops, sea — 31.0 million pounds of meats. . . .(previous high, 1961 — 27.5 million pounds).

Squid — 41.1 million pounds. . . .(previous high, 1946 — 40.3 million pounds).

U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS

Fish portions — 386.6 million pounds. . . .(previous high, 1977 — 355.4 million pounds).

All canned fishery products — 60.0 million standard cases . . . .(previous high, 1974 — 57.5 million standard cases).

Canned fishery products for human consumption — 47.6 million standard cases. . . .(previous high, 1974 — 45.2 million standard cases).

Canned tuna — 35.9 million standard cases. . . .(previous high, 1974 — 33.4 million standard cases).

Fish meal — 362,556 short tons. . . .(previous high, 1962 — 312,259 short tons).

Menhaden meal — 276,546 short tons. . . .(previous high, 1961 — 247,551 short tons).

Tuna and mackerel meal — 50,244 short tons. . . .(previous high, 1974 — 48,244 short tons).

Menhaden oil — 284.0 million pounds. . . .(previous high, 1971 — 244.0 million pounds).

Fish solubles — 167,319 short tons. . . .(previous high, 1959 — 165,359 short tons).

Menhaden solubles — 132,007 short tons. . . .(previous high, 1959 — 108,079 short tons).

U.S. IMPORTS

Value — $3,099.3 million. . . .(previous high, 1977 — $2,622.2 million).

All fillets and steaks — 423.6 million pounds. . . .(previous high, 1973 — 419.7 million pounds).

Groundfish fillets and steaks — 233.1 million pounds. . . .(previous high, 1976 — 228.3 million pounds).

Regular and minced blocks — 406.3 million pounds. . . .(previous high, 1977 — 385.1 million pounds).

Tuna, fresh and frozen — 861.8 million pounds. . . .(previous high, 1974 — 838.9 million pounds).

(Continued)

REVIEW

RECORDS ESTABLISHED

U.S. EXPORTS

Value — $905.5 million. . . .(previous high, 1977 — $520.5 million).

Edible fishery products — 448.3 million pounds valued at $831.7 million. . . .(previous high, 1977 — 331.1 million pounds valued at $473.4 million).

Value of nonedible fishery products — $73.9 million. . . .(previous high, 1974 — $67.2 million).

U.S. SUPPLY (DOMESTIC PRODUCTION PLUS IMPORTS)

All fillets and steaks — 584.9 million pounds. . . .(previous high, 1977 — 555.9 million pounds).

Canned tuna — 759.2 million pounds. . . .(previous high, 1974 — 713.1 million pounds).

Groundfish fillets and steaks — 295.5 million pounds. . . .(previous high, 1977 — 277.4 million pounds.)

Regular and minced blocks — 408.4 million pounds. . . .(previous high, 1977 — 387.3 million pounds).

Scallop meats — 61.7 million pounds. . . .(previous high, 1977 — 57.6 million pounds).

DOMESTIC LANDINGS

Menhaden landings of 2,595 million pounds (1,177 metric tons) made up 43 percent of the commercial landings in the United States.

Crabs were the second most important species in quantity and value.

Shrimp was the most important species in value and third in quantity.

Salmon was the third most important species in terms of value and fourth in quantity.

Tuna landings of 156.8 million pounds in Puerto Rico and other foreign ports comprised 93 percent of all landings made by U.S. craft at ports outside the United States. Landings of shrimp by U.S. fishing vessels at Central and South American ports accounted for the rest.

Cameron, Louisiana, led all other U.S. ports in quantity of commercial fishery landings. The second most important port in terms of quantity was Pascagoula-Moss Point, Mississippi, followed by San Pedro, California; Dulac-Chauvin, Louisiana; and Empire-Venice, Louisiana. The principal species landed was menhaden at all ports except San Pedro where tuna was the principal species.

Dutch Harbor, Alaska, was the leading U.S. port in terms of value, followed by Kodiak, Alaska; San Pedro, California; San Diego, California; and New Bedford, Massachusetts.

Louisiana led all States in volume of landings with 1,673.9 million pounds, followed by Alaska with 745.6 million pounds; California, 722.3 million pounds; Virginia, 538.9 million pounds; and Mississippi, 377.5 million pounds.

Alaska led all States in value of landings with $438.6 million, followed by California with $228.2 million; Louisiana, $190.2 million; Massachusetts, $152.3 million; and Texas, $148.9 million.

FOREIGN CATCH IN U.S. FCZ

Final 1978 fishing allocations to foreign nations in the U.S. FCZ were 2,084,371 metric tons, an increase of less than one-half of 1 percent (9,525 tons) compared with 1977. A sharp drop in the 1978 North Atlantic allocations and a small decline in the Washington, Oregon, and California allocations were offset by increases in 1978 allocations for foreign fishing in the Alaska FCZ.

In 1979, however, total initial allocations are lower than in 1978, chiefly because of a 135,000-ton "reserve" in the Gulf of Alaska and a 42,000-ton "reserve" in the Washington, Oregon, and California area for joint ventures between U.S. fishing vessels and foreign factory ships.

In 1977 the United States collected in advance $10.2 million in poundage fees from foreign nations based on initial allocations. At the end of 1977, the United States refunded $3.0 million, because foreign nations were unable to catch all that had been allocated to them. In 1978, the United States collected in advance $11.8 million in poundage fees from foreign nations. Refunds of 1978 payments for catches that were short of allocations have not been completed.

In 1978, foreign nations had permits for 692 catching vessels, down 7 vessels or 1 percent from 1977. The number of processing vessels dropped from 21 in 1977 to 10 in 1978.

REVIEW

IMPORTANT SPECIES

ALASKA POLLOCK AND OTHER ALASKA TRAWL FISH. Landings in 1978 by U.S. fishermen at Alaska ports of Alaska pollock and other trawl fish (cod, flounders, and rockfishes) were 5.5 million pounds valued at $729,000, up 98 percent in quantity and 115 percent in value from 1977. All were caught in the Gulf of Alaska. Landings of Alaska pollock of 2.6 million pounds in 1978 were five times the 1977 landings. Landings of cod in 1978 of 1.5 million pounds were slightly over double those of 1977.

The total foreign catch of trawl fish in the Alaska FCZ was 1.5 million metric tons (3.4 billion pounds) in 1978, up 16 percent from 1977. This total was considerably under the 1978 allocations of almost 1.8 million metric tons. About 90 percent of the catch came from the Bering Sea; the rest was caught in the Gulf of Alaska. The principal species in the foreign trawl catch were Atka mackerel, Alaska pollock, Pacific cod, yellowfin sole and other flounders, ocean perch and other rockfishes, and miscellaneous groundfish. Of these species, Alaska pollock was by far the most important. In 1978, the foreign catch of Alaska pollock was 1.1 million metric tons, up 64,000 tons or 6 percent from 1977. Catches of other trawl fish except rockfishes increased. Catches of flounders were 250,000 metric tons in 1978, up 78 percent from 1977. The catch of cod of 58,000 tons was 49 percent greater. The catch of Atka mackerel of 44,000 tons was up 125 percent. The catch of Pacific ocean perch and other rockfishes was 18,000 metric tons, down 45 percent compared with 1977.

NORTH ATLANTIC GROUNDFISH, FLOUNDERS, AND OTHER TRAWL FISH. Total U.S. trawl landings of the principal North Atlantic groundfish species were 374.4 million pounds valued at $109.1 million in 1978, up 12 percent in quantity and 26 percent in value from 1977. The principal trawl species are cod, cusk, flounders, haddock, red and white hake, Atlantic ocean perch, pollock, and whiting. Total annual landings of these species have risen steadily since reaching a low of 264.0 million pounds in 1974. Domestic landings of cod were 86.5 million pounds in 1978, up 15 percent from 1977, and the largest since 1946. Domestic landings of haddock were 39.5 million pounds, up 39 percent from 1977, and the highest since 1969. Atlantic pollock landings were 39.1 million pounds in 1978, up 36 percent over 1977. Atlantic pollock landings in 1978 were the second highest on record, and were exceeded only by landings in 1938 of 40.3 million pounds. Flounder landings of 103.6 million pounds in 1978 were about the same as in 1977 because of a large increase in landings of "other flounders" which offset declines in landings of the principal flounders—blackback, fluke, and yellowtail. Landings of whiting were 51.1 million pounds in 1978, up 13 percent from 1977, and the largest since 1968.

The U.S. fishery for cod, haddock, and yellowtail flounder has been under an FMP since March 1977. Emergency actions in response to a rapid influx of vessels into the fishery and strong market demand for catches characterized the management of this FMP. The emergency regulations of July 19, 1978, were designed to limit landings through a combination of quarterly (3-month) quotas, annual allocations by vessel size, and other restrictions. Despite these limits, several annual allocations were reached in less than a year. As a result, the New England Fisheries Management Council advanced the beginning of the 1979 fishing season from January 1, 1979, to October 1, 1978, but again several vessel class quotas were exceeded, and these fisheries were shut down before the end of the quarter. The fishery was reopened at the beginning of the second quarter, January 1, 1979.

Canadian catches of groundfish, flounders, and other trawl fish in the U.S. FCZ were 58.0 million pounds in 1978, up 92 percent over 1977. Heavier Canadian catches of cod and haddock accounted for most of the increase. Canadian fishing vessels are the only foreign vessels allowed to fish for these species.

Total trawl catches of other foreign countries were only 21,500 metric tons (47.4 million pounds), down from 123,000 tons in 1977, and far short of the final allocations for 1978 of 130,300 metric tons. Catches by other foreign countries dropped for red hake and silver hake (whiting); species for which there was a directed fishery. Incidental catches of butterfish, mackerel, and river herring were small. The catch of silver hake (whiting) was 14,400 tons in 1978, down 74 percent from 1977. The catch of red hake was 2,100 tons in 1978, down 59 percent compared with 1977.

PACIFIC GROUNDFISH, FLOUNDERS, AND OTHER TRAWL FISH. Commercial landings by U.S. fishermen in Washington, Oregon, and California of groundfish, flounders, and other trawl fish were 212.2 million pounds valued at $32.8 million in 1978, down 41 percent in quantity, but up 31 percent in value. Included in these data are landings of Alaska pollock, cod, flounders, Pacific hake, Pacific ocean perch and other rockfishes, and jack mackerel. The principal reason for the decline in quantity was a sharp reduction in the catch of jack mackerel from 110.2 million pounds in 1977 to 68.0 million pounds in 1978. Catches were up markedly for Pacific hake, Alaska pollock, and flounders.

The total foreign trawl catch off Washington, Oregon, and California was 98,700 metric tons (217.6 million pounds) in 1978, down 19 percent compared with 1977. This fishery is under a PMP that only allows a directed fishery for Pacific hake and jack mackerel. Catches of Pacific hake were 96,800 metric tons in 1978, down 18 percent compared with 1977; catches of jack mackerel were 900 metric tons in 1978, down 68 percent compared with 1977. The incidental catch of flounders, rockfishes, sablefish, and other species dropped to 1,000 metric tons in 1978 compared with 1,400 metric tons in 1977.

ANCHOVY. Total U.S. landings of anchovy were 35.4 million pounds, down 85 percent in 1978. Of this amount, 22.3 million pounds (63 percent) was reduced to meal, oil, and solubles. Another 12.0 million pounds (34 percent) were sold as live bait. The remaining 1.1 million pounds were used in canned pet food. Most of the anchovies landed were caught in purse seines, although small amounts for the reduction fishery were landed with lampara nets. In 1978, the exvessel value of anchovies sold as bait was $5.0 million.

REVIEW

IMPORTANT SPECIES

The significant decline in landings is attributable partly to a price dispute in the early part of the year, which kept the boats tied up until April. Additionally, a lack of legal-sized fish in the fall forced fishermen to direct their effort toward other species, such as mackerel and squid.

HALIBUT. U.S. landings of halibut were 17.7 million pounds (round weight) valued at $18.5 million, slightly less (11,000 pounds) in volume, but $1.2 million more in value compared with 1977. The Atlantic fishery accounted for 204,000 pounds valued at $289,000 in 1978. The International Pacific Halibut Commission (IPHC) reported the abundance of halibut, as indicated by the catch per unit of effort, increased again in Area 3 where the quota was set at 11 million pounds (dressed weight) in 1978. However, abundance was nearly the same as in 1977 in Area 2 (quota, 9 million pounds) where an increase in southeastern Alaska waters was offset by a decrease in British Columbia waters. The evidence of stock improvement is encouraging, but abundance is still far below the optimum level.

HERRING, SEA. U.S. commercial landings of sea herring were 154.4 million pounds valued at $17.2 million. Compared with 1977, this was 1.4 million pounds less in quantity, but worth $5.6 million more in value.

Landings of Atlantic sea herring were 111.3 million pounds. Despite heavy catches in the summer months, the Atlantic fishery declined 302,000 pounds from 1977 because of a late start in the juvenile fishery and the complete lack of juvenile herring in the Casco Bay area of Maine. This area supplies large numbers of juveniles to the sardine plants in the western part of the State. Low abundance of Atlantic sea herring in 1977 resulted in a zero TALFF in 1978 for foreign fishing under the sea herring PMP. The PMP was replaced by an FMP on December 20, 1978. Under the FMP, the New England Fishery Management Council determined that the expected domestic catch for 1978 would equal the optimum yield. Accordingly, a quota was established at 18,000 metric tons (39.7 million pounds), and the TALFF was set at zero for the fishing year beginning July 1, 1978, and ending June 30, 1979. The quota applies to mature herring only.

Landings of Pacific sea herring decreased from 44.2 million pounds in 1977 to 43.1 million pounds in 1978, but the average exvessel price increased from 15 cents per pound in 1977 to 24 cents in 1978.

In the Pacific, the foreign catch of sea herring was 8,434 metric tons in 1978, down sharply from the catch of 18,736 tons in 1977. The decline was the result of a sharp reduction in the TALFF for the Bering Sea, the only Pacific region where foreign fishing for this species is permitted. The U.S.S.R. took 72 percent of the catch, and Japan caught the rest.

MACKEREL, ATLANTIC. Landings of Atlantic mackerel were 3.6 million pounds with an exvessel value of $776,000, an increase of 555,000 pounds and $251,000 compared with 1977. The foreign catch of Atlantic mackerel in the U.S. FCZ was 330 thousand metric tons (726.6 million pounds) in 1978, up from 53 thousand metric tons (117.1 million pounds) in 1977.

MENHADEN. Atlantic and Gulf menhaden landings were a record 2,595.0 million pounds valued at a record $98.3 million. This was 798.9 million pounds more than 1977, and 247.1 million pounds more than 1962, the previous record year. Ninety-eight percent of the landings were reduced into meal, oil, and solubles. The rest was used for bait or canned for pet food. Louisiana was the principal State using menhaden for reduction, followed by Virginia, Mississippi, and North Carolina.

Landings of Gulf menhaden were 1,808.5 million pounds—83 percent more than in 1977 when 986.5 million pounds were landed. Gulf Coast landings in June were the largest on record (545.1 million pounds). Eighty vessels participated in the fishing in 1978; a few of these were inactive for short periods, and tropical storms reduced fishing for parts of several weeks at most ports. Age-2 menhaden dominated the catch (60-75 percent) in 1978, but in 1977, age-1 fish accounted for most of the catch. Age-1 fish were most of the balance in 1978, but a few age-3 menhaden were landed. Landings in the western ports, especially at Cameron, La., contained a higher portion of age-1 fish than in the central Gulf ports. Eastern Gulf ports also contained a higher proportion of age-1 fish in 1978; age-2 menhaden contributed substantially to the excellent fishing in this area.

Landings along the Atlantic Coast were 786.5 million pounds worth $20.2 million—declines of 23.2 million pounds and $8.7 million when compared with 1977. Ninety-three percent of the Atlantic Coast catch was used by plants processing menhaden into meal and oil. Monthly landings of Atlantic menhaden indicated that April and May were poor, June fair, and July were below the previous month and similiar to the 1977 landings. Fishing recovered in August and almost duplicated the 1977 pattern. Forty-seven vessels participated in fishing in 1978 compared to 51 the previous year. Age-1 (17 percent) and age-2 fish (68 percent) have dominated landings in recent years, but age-3 fish (14 percent) are contributing substantial amounts in some areas. Age-2 fish were most of the landings in the Chesapeake Bay area, and the rest were age-1 fish.

There is no foreign fishing for menhaden under the provisions of the FCMA.

PACIFIC SALMONS. U.S. commercial landings of Pacific salmons were 404.5 million pounds valued at a record $254.5 million, an increase of 68.8 million pounds (20 percent) and $32.7 million (14 percent). Excellent runs of pink salmon in Alaska were the major reason for the increased landings. Alaska had 86 percent of the total landings; Washington, 9 percent; Oregon, 3 percent; and California, 2 percent. A small amount (1,000 pounds) of silver salmon was landed in the Great Lakes.

Landings in Alaska were 349.3 million pounds, up 27 percent (74.0 million pounds) compared with 1977, and the largest since 1940. Pink salmon landings (194.9 million pounds) were the second largest on record, only 837,000 pounds less than 1918, the record year. Red salmon landings (89.7 million pounds) increased 13 percent, and chinook salmon landings (12.8 million pounds) increased 16 percent. Lighter landings were recorded for chum salmon (37.3 million pounds), down 33 percent; and silver salmon (14.7 million pounds), down 10 percent compared with 1977.

REVIEW

IMPORTANT SPECIES

Landings of salmon in Washington were 38.1 million pounds valued at $58.5 million. Compared with 1977, landings were down for all species except chum salmon. Landings of chum salmon were 13.2 million pounds, up 11.3 million pounds compared with 1977.

Salmon landings in Oregon were 10.5 million pounds valued at $15.0 million, a decline of 14 percent in volume and 22 percent in value compared with 1977. Chinook salmon landings (4.3 million pounds) declined almost 50 percent, and larger landings of silver salmon (6.2 million pounds) were not enough to offset the lower chinook catch.

California landings of salmon increased from 4.5 million pounds in 1977 to 6.6 million pounds in 1978. California landings were higher from the troll fleet in 1978, because the northern Oregon and Washington waters were closed to trolling in the spring and early summer season to meet fish allocation demands imposed by court decisions. Thus, trollers that would normally have fished those waters and whose landings would have been recorded in Washington were forced southward to compete with California and southern Oregon boats.

SABLEFISH. U.S. commercial landings of sablefish were a record 29.2 million pounds valued at $8.3 million. This was 3.8 million pounds (15 percent) above 1977, the previous record year, and 11.2 million pounds above the 1973-77 average. California landings were 19.0 million pounds (down 5 percent); Alaska, 4.8 million (up 92 percent); Oregon, 2.8 million (up 275 percent); and Washington, 2.6 million pounds (up 23 percent). Expanded effort in the Gulf of Alaska resulted in increased catches.

Of the 14.7 thousand metric tons of sablefish allocated to foreign nations in 1978, 9.2 thousand metric tons (20.2 million pounds) were caught, down 56 percent from 1977. Japan took 90 percent of the catch, and the Republic of Korea took 8 percent.

TUNAS. Total landings of tunas by U.S. fishermen at ports in the United States, Puerto Rico, and American Samoa were 565.7 million pounds valued at $239.0 million in 1978, up 21 percent in quantity and 32 percent in value over 1977. The quantity landed in 1978 was slightly above the average for the previous 5 years, but below the record 659.9 million pounds landed in 1976.

The principal reason for the increase in total landings in 1978 was a sharp rise in landings of skipjack to a record 243.4 million pounds—almost double the 1977 catch, and far above the average for the previous 5 years of 149.6 million pounds. Yellowfin tuna landings were 267.9 million pounds in 1978, down 6 percent from 1977. Inadvertent kills of porpoises by tuna fishermen while seining for yellowfin were estimated at 15,000 in 1978, down sharply from the 27,000 figure reported for 1977, and far below the 1978 quota allowed by NMFS of 51,945. Albacore landings were 37.3 million pounds in 1978, up 18 percent over 1977. Bluefin landings were 14.2 million pounds in 1978, down 18 percent compared with 1977.

Slightly more than 70 percent of tuna landings were made at ports in the continental United States, principally California. Most of the rest were landed in Puerto Rico. Landings in Puerto Rico were 147.4 million pounds in 1978, up 19 percent over 1977.

NMFS and the U.S. Coast Guard closely regulate fishing for yellowfin tuna by U.S. fishermen in a major producing area of the eastern Pacific Ocean known as the Commission's Yellowfin Regulatory Area (CYRA). The regulation is in response to recommendations of the Inter-American Tropical Tuna Commission (IATTC). The total yellowfin quota in the CYRA for member nations in 1978 was 210,000 short tons. In 1978, the season for fishing yellowfin within the CYRA opened on January 1 and closed on May 6.

Shown below are preliminary data of the yellowfin catch by the international tuna fleet taken in the CYRA. The U.S. share decreased from 59 percent of the 1977 catch to 57 percent of the 1978 catch.

Country	1977	1978 (1)
	-- Short tons --	
Bermuda	3,703	2,711
Canada	4,883	2,253
Ecuador	6,830	7,614
Japan	1,043	1,010
Mexico	18,873	19,926
Panama	15,314	11,658
Peru	3,762	2,679
United States	120,623	104,726
Other	27,928	29,777
Total	202,959	182,354

(1) Preliminary.

Mexico withdrew from IATTC, effective November 1978. Withdrawal of Costa Rica will be effective in April 1979. Negotiations are underway for a new treaty to manage tunas in the eastern Pacific Ocean.

In response to recommendations of the International Commission for the Conservation of Atlantic Tuna (ICCAT), NMFS and the U.S. Coast Guard closely control fishing of bluefin tuna by U.S. anglers and commercial fishermen in the Atlantic Ocean. Regulations are designed to protect undersized fish (under 14 pounds) and the prime spawning size fish (115-299 pounds). The catch of other sizes is restricted to amounts taken in recent years. Commercial fishing for yellowfin tuna of less than 7 pounds (3.2 kilograms) is prohibited.

Landings of bluefin by commercial fishermen at New England and other Atlantic Coast ports were 3.3 million pounds valued at $2.6 million in 1978, down 15 percent in quantity, but up 36 percent in value compared with 1977.

Under the FCMA, foreign nations are not required to report catches of tunas to the U.S. Government. It is believed that foreign vessels catch tuna in several areas of the U.S. FCZ, but estimates for recent years only are available for the Gulf of Mexico FCZ. Japanese catches of bluefin tuna in the U.S. FCZ from Key West, Florida, to Brownsville, Texas, are estimated to be as follows: 1976—2,915 metric tons; 1977—2,626 metric tons; and 1978—2,331 metric tons.

REVIEW

IMPORTANT SPECIES

CLAMS. Landings of hard, ocean quahog, soft, surf, and other clams were 87.7 million pounds of meats worth $74.1 million. Compared with 1977, landings decreased 9 percent in volume, but were about the same in value. The average exvessel price per pound increased from 77 cents in 1977 to 84 cents in 1978.

Surf clam landings were 39.2 million pounds of meats, down 23 percent from 1977 landings of 51.0 million pounds. This was the first full year this fishery operated under the FMP for surf clams and ocean quahogs prepared by the Mid-Atlantic Fishery Management Council. The FMP included quarterly quotas, effort restrictions, closed areas, and a moratorium on entry of vessels into the fishery. New Jersey landings (15.2 million pounds) decreased 34 percent, Virginia landings (12.8 million pounds) decreased 19 percent, and Maryland landings (8.4 million pounds) were about the same compared with 1977.

The ocean quahog fishery produced 23.0 million pounds of meats, up 22 percent from 1977 landings. With reduced quotas on surf clams, more vessels turned to this fishery as an alternative to the market previously served by surf clams. New Jersey was the leading producer in the United States, accounting for 75 percent of the total landings. Maryland was second with 12 percent of the total, followed by Rhode Island, almost 12 percent, and Massachusetts, 1 percent.

Landings from the hard clam fishery produced 13.3 million pounds of meats valued at $29.7 million, a decrease of 2.1 million pounds, but an increase of $1.5 million compared with 1977. Landings in the Middle Atlantic region (mostly New York) were 8.1 million pounds; New England, 2.9 million pounds; South Atlantic, 1.2 million pounds; Pacific, 606,000 pounds; and the Chesapeake region, 518,000 pounds.

Landings of soft clams yielded 10.1 million pounds of meats, about the same as the 1977 landings of 10.7 million pounds. Maine landings were 6.0 million pounds, down 23 percent from the 7.8 million pounds landed in 1977. Landings in Maryland (3.4 million pounds) increased 1.8 million pounds compared with 1977.

CRABS. Landings of all species of crabs were a record 449.1 million pounds valued at a record $285.0 million. This was an increase of 50.6 million pounds and $82.5 million compared with 1977, the previous record year. Landings for all species increased except dungeness crabs.

Landings of hard blue crabs were 138.2 million pounds valued at $28.2 million. Compared with 1977, this was an increase of 7 percent in quantity and 2 percent in value. Production increased 52 percent over 1977 in the South Atlantic States (47.1 million pounds), but decreased 8 percent in the Chesapeake States (52.0 million pounds). The spring and early summer catches were disappointing because of a severe winter kill. Production in the Gulf States (37.9 million pounds) decreased 6 percent. In early October, Louisiana health officials traced several cases of cholera to crabs landed in their State. Although crabbing was not banned in Louisiana, sales were down, and health officials cautioned consumers to use proper cooking and hygiene procedures for crabs.

Dungeness crab landings were 39.3 million pounds worth $28.5 million, a decrease of 21.1 million pounds compared with the 1977 record landings, but were 10.7 million pounds above the previous 5-year average. Compared with 1977, the exvessel value increased $2.7 million or an average 30 cents per pound.

Landings in California were down 54 percent; Washington, down 41 percent; and Oregon, down 39 percent. Landings were down in Washington and Oregon despite strong fishing effort in the first half of the season. Many fishermen left the fishery for other fisheries and did not return. Because of higher prices, the fishermen who stayed had a profitable year. Landings in Alaska increased 6.2 million pounds but were not enough to offset decreases in the other Pacific Coast States. The Alaska increase was attributed to greater fishing effort because of higher prices.

U.S. landings in 1978 of king crabs were 130.2 million pounds valued at $168.1 million to the fishermen. This was the second largest harvest in the history of this fishery, surpassed only by the 1965 landings of 159.2 million pounds. Landings from the Bering Sea were 113.3 million pounds with 91 million pounds landed at Dutch Harbor. Because exvessel prices reached an all-time high of $1.70 per pound at the port of Kodiak, much Bering Sea king crab was landed there.

Snow (tanner) crab landings were a record 129.5 million pounds valued at $52.6 million, an increase of 32 percent in volume and 70 percent in value. The fishery of the Bering Sea continued to expand in 1978 with 119 vessels taking a record 71 million pounds, primarily Chionoecetes bairdi. In 1978, U.S. processors made their first attempt to harvest and process the smaller C. opilio species of snow (tanner) crab. Over 1 million pounds were landed with an exvessel price of 30 cents per pound. Landings from the Gulf of Alaska were 58.5 million pounds with an exvessel value of 38 cents per pound compared with 45.2 million pounds landed in 1977 with a value of 35 cents per pound.

Foreign catches of snow (tanner) crab in the U.S. FCZ were 14,962 metric tons (33.0 million pounds) in 1978, up 20 percent over 1977, but still within the 1978 quota of 15,000 tons. Japan was the only foreign nation fishing in the zone, and all of the catch came from north of 58° N. Almost all of the catch was Chionoecetes opilio, the smaller and less valuable snow (tanner) crab. In 1979, the quota remained the same.

REVIEW

IMPORTANT SPECIES

LOBSTER, AMERICAN. Landings of American lobsters were 34.4 million pounds valued at a record $64.6 million, an increase of 2.7 million pounds in volume and $6.9 million in value compared with 1977. The average price per pound increased from $1.82 in 1977 to $1.88 in 1978. Compared with 1977, Maine landings (19.1 million pounds) increased 3 percent, and Massachusetts landings (9.8 million pounds) increased 33 percent. Rhode Island landings (2.8 million pounds) were down 20 percent from 1977. The Northeast Marine Fisheries Board adopted a comprehensive plan to manage this fishery. Members of the Board (fishery administrators from 10 coastal States and NMFS) must endorse the plan before it takes effect. The plan calls for an increase in the legal minimum size that may be taken and the development of long-range programs designed to reduce current high levels of lobster fishing effort and excessive rates of exploitation of the resource.

LOBSTER, SPINY. U.S. landings of spiny lobsters were 4.6 million pounds valued at $9.7 million, a decrease of 854,000 pounds in volume but an increase of $102,000 compared with 1977. The 1978 landings were 57 percent below the average for the previous 5 years. The average exvessel price per pound in 1978 was $2.10 compared with $1.75 in 1977. Florida landings were 99 percent of the total landings, and Hawaii, 1 percent.

OYSTERS. Total U.S. landings yielded 51.0 million pounds of meats valued at $60.9 million, an increase of 5.0 million pounds and $8.4 million compared with 1977. The harvest increased in all regions compared with 1977. The Chesapeake States led in production with 21.5 million pounds of meats, followed by the Gulf States with 18.2 million pounds. The fishery in Maryland and Virginia fared well, because scientists reported the best spat set since 1965 on natural oyster bars along the Eastern Shore. Gulf Coast landings (18.2 million pounds) increased slightly compared with 1977 (18.1 million pounds). The harvest in Louisiana was down about 1 million pounds, because the oysters were extremely small possibly caused by pollution or improper salt balance in the water. Pacific Coast landings were 5.8 million pounds of meats, an increase of 4 percent over 1977.

SCALLOPS. U.S. landings of all species yielded a record 33.3 million pounds of meats worth $81.8 million. This was an increase of 20 percent in volume and 78 percent in value compared with 1977.

Canadian catches of Atlantic sea scallops in the U.S. FCZ were 12,123 metric tons of meats (26.7 million pounds) in 1978, up 3 percent over 1977.

U.S. bay scallop landings yielded 1.4 million pounds valued at $4.2 million, a decrease of 332,000 pounds and $260,000 compared with 1977. Landings in Massachusetts, the leading producing State, were down 33 percent in 1978.

Landings of calico scallops were 948,000 pounds of meat valued at $1.3 million in 1978. Compared with 1977, this was a decrease of 163,000 pounds (15 percent), but an increase of $275,000 (27 percent) in value. Early in the year a new scallop bed was discovered off the South Carolina-Georgia coast, and most of the landings (698,000 pounds) were made in the two States.

SHRIMP. U.S. shrimp landings were 422.9 million pounds (heads on) valued at $385.5 million. Compared with the 1977 record year, this was 53.8 million pounds less in volume, but $30.3 million more in value.

Landings in the Gulf States were 248.3 million pounds, a decrease of 17.6 million pounds (7 percent) compared with 1977. Landings declined in all Gulf States except in Louisiana where the 104.4 million pounds were slightly more than the 104.0 million pounds landed the previous year. Texas landings (84.6 million pounds) were 8 percent less. The shrimp were smaller and therefore more effort had to be expended to meet the quantities caught the previous year.

Pacific Coast landings (154.4 million pounds) were 20 percent less than in 1977 and 3 percent below the 1973-77 average.

Alaska landings of shrimp were 74.5 million pounds, a decrease of 42.5 million pounds (36 percent) compared with 1977. Several factors appear to have decreased stocks in the Kodiak, Chignik, and South Peninsula areas: changes in oceanographic conditions (water temperature, plankton blooms), distribution of the fishing effort, increases in cod and pollock populations, and premature egg losses.

REVIEW

IMPORTANT SPECIES

Landings of shrimp in Oregon continued to escalate in 1978 with 57.0 million pounds compared with 48.6 million pounds in 1977.

The New England shrimp fishery was almost negligible with only 7,000 pounds landed in Massachusetts. The Atlantic States Marine Fisheries Commission continued its ban on shrimping in the Gulf of Maine in 1978.

SQUID. U.S. commercial landings of squid were a record 41.1 million pounds valued at $4.9 million, an increase of 16.3 million pounds and $2.8 million compared with 1977. U.S. exports of this product were 10.6 million pounds compared with 5.0 million pounds in 1977. California landings were 37.4 million pounds, almost double the amount taken in 1977. Because of difficulties in the anchovy fishery (price disputes and fish under legal-size), California fishermen concentrated on the squid fishery instead. Atlantic Coast landings of 3.7 million pounds were 1.7 million pounds less than in 1977.

PER CAPITA CONSUMPTION

PER CAPITA CONSUMPTION. U.S. per capita consumption of edible fishery products in 1978 reached a record of 13.4 pounds (edible meat) per person. This was 0.6 pound more than the 12.8 pounds consumed in 1977. Most of the increase in 1978 was in canned fishery products, which rose to 5.0 pounds per person, up 0.4 pound from 1977. Canned tuna increased 0.4 pound and canned salmon, 0.1 pound; however, canned shellfish items decreased 0.1 pound. Per capita consumption of fresh and frozen fish and shellfish increased to 7.9 pounds in 1978, up only 0.1 pound from 1977. However, fresh and frozen finfish increased 0.4 pound owing to an increase of 0.3 pound in the consumption of blocks and groundfish fillets and steaks. There was also a 0.1-pound increase in consumption of other fish. Offsetting most of the increase in fresh and frozen finfish was a decline of 0.3 pound in consumption of fresh and frozen shellfish from 2.6 pounds per person in 1977 to 2.3 pounds in 1978. Fresh and frozen shrimp, clams, and crabs each declined 0.1 pound. Cured consumption increased to 0.5 pound in 1978, up 0.1 pound compared to last year.

In addition to consumption of commercially caught fish and shellfish, recreational fishermen catch a considerable amount estimated to be 3 to 4 pounds (edible meat) per person.

PER CAPITA USE. The per capita use of all fishery products, both edible and industrial, was 52.7 pounds (round weight) in 1978, up 3.9 pounds (8 percent) from 1977. The reason for the increase was that both U.S. production and imports were up. The per capita use of edible fishery products rose 8.8 percent and industrial use increased 5.5 percent.

PROCESSED FISHERY PRODUCTS

FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1978, the U.S. production of raw (uncooked) fish fillets and steaks was 161.3 million pounds valued at $208.9 million, up almost 1.0 million pounds in quantity but over $17.0 million in value compared with 1977. Once again flounder fillets led all species produced with 41.7 million pounds or 25.9 percent of the total production. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch) was 62.4 million pounds compared with 59.9 million pounds produced in 1977. Landings of all groundfish species were higher than in the previous year.

FISH BLOCKS. The U.S. production of blocks is not reported by species, but is included with the production data on fillets to avoid disclosure of individual operations. Total U.S. block production was 2.1 million pounds valued at $1.7 million in 1978, compared with 2.1 million pounds valued at $1.5 million in 1977.

FISH STICKS AND PORTIONS. Production of fish sticks and portions was 479.8 million pounds valued at $497.0 million in 1978, up 37.1 million pounds and $86.5 million compared with 1977. The production of fish portions alone of 386.6 million pounds valued at $412.0 million set new records in 1978. The production of cooked batter-coated fish portions (86.5 million pounds) registered a significant increase of 28.4 million pounds, when compared with the 1977 production of 58.1 million pounds. Raw breaded portions (180.0 million pounds) and unbreaded portions (32.4 million pounds) increased slightly over the same period; however, cooked breaded portions (87.7 million pounds) declined 5.1 million pounds. Fish stick production increased from the 1977 production of 87.2 million pounds valued at $68.7 million to 93.2 million pounds valued at $85.0 million in 1978.

BREADED SHRIMP. Data for 1978 are not available for all plants that produce breaded shrimp. The 44 plants reporting to NMFS on a quarterly basis produced 108.0 million pounds valued at a record $251.8 million. In 1977, these same plants produced 94.1 million pounds valued at $209.5 million; however, 13 additional firms reporting on an annual basis produced 3.3 million pounds valued at $7.1 million in 1977.

FROZEN FISHERY TRADE. In 1978, stocks of frozen fishery products in cold storage were at a low of 319.1 million pounds on April 30 and at a high of 427.4 million pounds on October 31. Cold storage holdings of shrimp products were 92.4 million pounds on January 31, dropped to 58.7 million pounds by June 30, and ended the year at 64.8 million pounds on December 31. Fish block holdings were 88.6 million pounds on September 30 because of larger imports of cod and pollock for the month. By the end of the year, these stocks had dropped to 71.9 million pounds. Record landings of snow (tanner) crabs in 1978 contributed to the all-time high total crab products in storage of 51.3 million pounds on May 31.

REVIEW

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The 1978 pack of canned fishery products in the United States, American Samoa, and Puerto Rico, was a record 60.0 million standard cases (1.7 billion pounds) valued at a record $2.0 billion—increases of 8.3 million standard cases (229.6 million pounds) and $405.0 million over the 1977 pack. The 1978 pack included a record 47.6 million standard cases (1,070.3 million pounds) for human consumption and 12.4 million standard cases (595.6 million pounds) for bait and animal food. The packs of salmon, Maine sardines, tuna, fish roe and caviar, squid, and animal food increased in 1978, but the packs of jack mackerel, tunalike fish, clam and clam products, oysters, and shrimp declined.

CANNED SALMON. The 1978 U.S. pack of Pacific salmon was 3.4 million standard cases valued at $248.4 million, an increase of 279,500 standard cases or 9 percent in volume compared with the 3.1 million standard cases packed in 1977. The Alaska pack of 3.4 million standard cases was 496,000 standard cases more than the 2.9 million standard cases packed the previous year and was 99 percent of the U.S. salmon pack. Pink salmon, with the highest pack since 1968, was over one-half the total salmon pack in 1978. The 1978 production of red or sockeye salmon (999,300 standard cases) was 55,400 standard cases less than the 1977 pack of 1,054,700 standard cases. The pack of chum salmon also declined and was 16 percent less than in 1977. Nearly 18,000 standard cases of salmon were produced in Washington and Oregon—the lowest pack on record.

CANNED SARDINES. The pack of Maine sardines (sea herring) was 1.1 million standard cases valued at a record $35.6 million, increases of 123,100 standard cases and $8.4 million compared with 1977. In 1978, the pack of herring and herring specialties was 95,020 standard cases valued at $5.8 million compared with the 1977 pack of 138,862 standard cases valued at $7.1 million.

CANNED TUNA. The 1978 U.S. pack of tuna was a record 35.9 million standard cases (707.4 million pounds) valued at a record $1.3 billion. The pack was 8.2 million standard cases more than the 1977 pack of 27.7 million standard cases, and exceeded the previous record 33.4 million standard cases produced in 1974 by 2.5 million standard cases. The pack of albacore (white meat tuna), 7.1 million standard cases, was 20 percent of the 1978 pack and 836,000 standard cases more than the 6.2 million cases packed in 1977. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remaining 28.8 million standard cases. Plants in the continental United States packed 44 percent of the total; American Samoa, Hawaii, and Puerto Rico packed the rest. Canned tuna packed from landings by U.S. fishermen was 258.1 million pounds, 26.9 million pounds less than the record 285.0 million pounds packed in 1976. A record of 449.3 million pounds of tuna from imported fish was packed in 1978. Over 861.8 million pounds (round weight) of fresh and frozen tuna were imported, setting a new record in 1978. This was 191.7 million pounds more than in 1977 when 670.1 million pounds were imported, and 22.9 million pounds more than the previous record of 838.9 million pounds in 1974.

CANNED CLAMS. The U.S. pack of clams and clam products, excluding clam specialties, was 2.7 million standard cases valued at $59.6 million in 1978—declines of 176,400 standard cases and $4.9 million. This can be attributed to smaller landings of clams in 1978, 87.7 million pounds of meats compared with 96.2 million pounds in 1977. The 1978 pack of whole and minced clams (689,400 standard cases) represented 26 percent of the total pack with chowder and juice the rest.

CANNED SHRIMP. The 1978 pack of shrimp was 2.3 million standard cases valued at $45.8 million—down 1.3 million cases and $25.5 million compared with the 1977 pack of 3.6 million standard cases valued at $71.3 million. Of the 2.3 million standard cases, 1.4 million cases were packed in plants in Louisiana and Mississippi, the remaining 959,000 standard cases in plants in Alaska, Oregon, and Washington. Landings of shrimp declined from 476.7 million pounds in 1977 to 422.9 million pounds in 1978, reflecting a smaller pack in the canned production.

OTHER CANNED ITEMS. The U.S. pack of jack mackerel was 579,000 standard cases valued at $7.2 million in 1978, slightly less than 686,000 standard cases valued at $11.9 million packed in 1977. A decline in landings caused this decrease.

The pack of tunalike fish (bonito) was 181,000 standard cases in 1978 valued at $3.6 million compared with 473,000 standard cases valued at $10.6 million packed in 1977. The natural pack of oysters was 43 percent less than the 146,700 standard cases packed in 1977. Nine plants canned natural oysters in 1977 while 5 canned in 1978.

CANNED PET FOOD. In 1978, the pack of pet food (10 pounds of fish per standard case of 48 one-pound cans) was 12.4 million standard cases valued at $222.6 million, an increase of 1.7 million standard cases and $56.9 million more than the 1977 pack. A larger pack of tuna caused this increase in the pet food production.

REVIEW

PROCESSED FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The 1978 value of the production of industrial fishery products in the United States, American Samoa, and Puerto Rico was a record $253.0 million, $62.4 million more than that produced in 1977. In terms of value, the leading State was Louisiana ($107.4 million); followed by Maine ($32.5 million); and Virginia ($24.4 million).

FISH MEAL AND SCRAP. Domestic production in 1978 (including shellfish meal) was a record 362,556 short tons, 80,265 short tons more than produced in 1977, and 50,297 short tons more than produced in 1962, the previous record year. Menhaden meal (276,546 short tons) set a record in 1978, and was 78 percent of the total fish meal production. Production of menhaden meal was 43 percent more than the 193,268 short tons produced in 1977, and exceeded the previous record year 1961 by 29,013 short tons. Production of tuna and mackerel meal set a new record in 1978 of 50,244 short tons. This was 11,016 short tons more than the 1977 production (39,228 short tons), and 2,000 short tons more than in 1974, the previous record year. Anchovy meal production (2,071 short tons) in 1978 declined 16,800 short tons compared with 1977. The lower production was attributed to a serious decline in the landings of anchovies.

FISH SOLUBLES. Domestic production of fish solubles was a record 167,319 short tons—44,989 short tons more than the 122,330 short tons produced in 1977 and 1,960 short tons more than the previous record year, 1959, when 165,359 short tons were produced. Menhaden solubles accounted for 79 percent of the production and were a record 132,007 short tons—23,928 short tons more than the previous record year, 1959, when 108,079 short tons were produced.

FISH OILS. The domestic production of fish oils (294.9 million pounds) increased 161.7 million pounds from the 1977 production of 133.2 million pounds. This production, the second highest on record, fell short of the record 299.3 million pounds produced in 1936 by 4.4 million pounds. Production of menhaden oil (284.0 million pounds) once again set a new record and was 96 percent of the fish oil production. Tuna and mackerel oil increased slightly, but anchovy oil production declined to 799,000 pounds, compared with 6.2 million pounds produced a year earlier.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products (grit and lime) were valued at $4.5 million in 1978 compared with $6.7 million in 1977. The value of other industrial products declined slightly from $44.4 million in 1977 to $43.1 million in 1978. Items included in this category are agar-agar, animal feeds, crab and clam shells for food processing, fish pellets, Irish moss extract, kelp products, liquid fertilizers, pearl essence, and shark leathers.

FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. Total U.S. imports of fishery products for consumption were $3,099.3 million, $477.1 million (18 percent) more than in 1977. Imports of edible fishery products were 2,420.8 million pounds valued at $2,274.7 million, an increase of 11 percent in quantity and 9 percent in value. Increased receipts of fillets and steaks, regular and minced blocks, fresh and frozen tuna, tuna loins and discs, canned tuna, and oysters accounted largely for the gain. Shrimp, one of the major import items, declined slightly. Other important items showing decreases were scallops, bonito and yellowtail, and canned clams.

Imports of nonedible fishery products were valued at $824.6 million, $280.9 million or 52 percent more than in 1977.

EXPORTS. U.S. exports of domestic fishery products were a record $905.5 million in 1978, $385.0 million (74 percent) more than the previous year. Exports of edible fishery products were 448.3 million pounds valued at $831.7 million in 1978, compared with 331.1 million pounds valued at $473.4 in 1977. There were major increases in 1978 exports of fresh and frozen king crab, shrimp, and salmon, as well as canned mackerel, salmon, sardines, and canned squid. Exports of fresh and frozen salmon were a record 125.8 million pounds, up 80 percent from 1977. Exports of canned salmon were a record 32.5 million pounds in 1978, up 53 percent from 1977. Exports of fresh and frozen shrimp were a record 34.8 million pounds in 1978, up 33 percent from 1977.

Exports of nonedible fishery products were $73.9 million in 1978 compared with $47.1 million in 1977. The increase was attributed to larger exports of menhaden oil—$42.3 million in value in 1978, compared with $18.1 million in 1977.

THE FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976

The Fishery Conservation and Management Act of 1976 (FCMA), Public Law 94-265, signed on April 13, 1976, provides for the conservation and exclusive management of all fishery resources within the U.S. fishery conservation zone (FCZ), except highly migratory species of tuna. It also provides for exclusive management authority over Continental Shelf fishery resources and over anadromous species beyond the U.S. FCZ, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such sea or zone is recognized by the United States.

The U.S. FCZ extends from the seaward boundaries of the territorial sea (3 nautical miles from shore for all but 2 States) to 200 nautical miles from shore. The seaward boundaries of Texas and the Gulf Coast of Florida are 3 marine leagues (9 nautical miles).

GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the FCMA, the U.S. Department of State, with cooperation from the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, negotiates a Governing International Fishery Agreement (GIFA) with foreign countries wishing to fish within the U.S. FCZ. After the GIFA is signed it is transmitted by the President to the Congress for review.

FOREIGN FISHING PERMIT

After a GIFA is in force, the foreign nation submits a vessel permit application for each vessel to the U.S. Department of State. The U.S. Department of State provides copies of the application to the Congress, the U.S. Coast Guard, the appropriate Regional Fishery Management Council and a copy with recommendations to the Assistant Administrator for Fisheries of NMFS. NMFS also receives recommendations from the Regional Fishery Management Councils and the U.S. Coast Guard.

The Assistant Administrator for Fisheries of NMFS reviews all recommendations pertinent to the application and, after consultation with the U.S. Department of State and the U.S. Coast Guard, may approve the application. The conditions and restrictions on the approval of the application, and the request for fees, are sent to the foreign nation through the U.S. Department of State.

Vessel permits are prepared by NMFS and transmitted through the Department of State to the foreign nation.

FEES

Foreign nations (except Canada) engaged in fisheries subject to U.S. jurisdiction are charged permit fees, a poundage fee, a foreign fee surcharge, and an observer fee.

The permit fees are annual charges of $1 per gross registered ton for each vessel engaged in fishing; 50 cents per gross registered ton for each vessel engaged in processing fish (not to exceed $2,500 per vessel); $200 for each ship assisting other vessels in harvesting or processing; and $200 for each vessel in a nonretention fishery.

The poundage fee is computed by taking 3.5 percent of the dockside (exvessel) price of fish that are allocated annually to each foreign nation. The value of the fish is based on the dockside price received by U.S. fishermen. For species not landed in the United States, an appropriate foreign dockside price is used. Upon application by a foreign nation at the end of the year, a refund is made for the unused allocations.

Beginning in 1979, there will be a surcharge of up to 20 percent on each nation's permit fee and poundage fee, but not on the observer fee. The surcharge is used to capitalize a fund to compensate U.S. fishermen operating in the U.S. FCZ whose vessels are lost or damaged because of foreign vessel activities, or whose fishing gear is lost or damaged by any foreign or domestic vessel or by "Acts of God." The surcharge is in two installments. The first installment is 10 percent, and is payable when the permit fee and poundage fee are paid. The amount of the second installment will be reduced or waived if actual claims experience indicates that the total of claims against the fund is not as high as estimated.

The observer fee covers U.S. costs including salary, per diem, transportation, and overhead for U.S. observers on board foreign vessels. The fee is computed on the basis of actual observer trips.

FOREIGN ALLOCATIONS

The total allowable level of foreign fishing (TALFF), if any, for any fishery subject to the exclusive fishery management authority of the United States, is that portion of the optimum yield (OY) of such fishery that will not be harvested by vessels of the United States.

Each assessment of OY and each assessment of the anticipated U.S. harvest will be reviewed during each fishing season. Adjustments to TALFFs will be made based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets, and other relevant factors.

PRELIMINARY FISHERY MANAGEMENT PLANS (PMPs)

If a foreign nation that has entered into a Governing International Fishery Agreement (GIFA) with the United States applies for permission to fish within the U.S. FCZ, the Secretary of Commerce is empowered to prepare and implement a PMP. PMPs apply only to foreign fishermen, and generally remain in effect until an FMP, prepared by the appropriate Regional Fishery Management Council, goes into effect. As of March 20, 1979, the following PMPs were in effect:

Atlantic PMPs

Atlantic Billfishes and Sharks (43 FR 3818, Jan. 27, 1978)

Hake Fisheries of the Northwestern Atlantic (42 FR 10146, Feb. 18, 1977)

Finfish Caught Incidental to the Foreign Trawl Fisheries of the Northwestern Atlantic (42 FR 9950, Feb. 17, 1977)

Mackerel Fishery of the Northwestern Atlantic (42 FR 9552, Feb. 16, 1977)

Squid Fisheries of the Northwestern Atlantic (42 FR 9597, Feb. 16, 1977)

Pacific PMPs

Sablefish Fishery of the Eastern Bering Sea and the Northeastern Pacific (42 FR 8534, Feb. 10, 1977)

Seamount Groundfish Fishery of the Pacific (42 FR 8568, Feb. 10, 1977)

Shrimp of the Eastern Bering Sea and Gulf of Alaska (42 FR 12386, Mar. 3, 1977)

Snail Fishery of the Eastern Bering Sea (42 FR 9334, Feb. 15, 1977)

Trawl Fisheries and Herring Gillnet Fishery of the Eastern Bering Sea and Northeast Pacific (42 FR 9298, Feb. 15, 1977)

Trawl Fisheries of Washington, Oregon, and California (42 FR 8578, Feb. 10, 1977)

FISHERY MANAGEMENT PLANS (FMPs)

The FCMA requires that Regional Fishery Management Councils (and in certain cases, the Secretary of Commerce) prepare FMPs, and that the Secretary of Commerce approve and implement them. Each Council is authorized to prepare FMPs on fisheries within its geographical area of authority.

The Secretary of Commerce has the general responsibility under the Act to implement any FMP or amendment approved or prepared by the Secretary. The Secretary may promulgate such regulations as may be necessary to implement any approved FMP. Enforcement of the FCMA, including the provisions of approved management plans and regulations, is a joint responsibility of the Secretary of Commerce and the Secretary of the department in which the U.S. Coast Guard is operating.

Both foreign and domestic fishing is controlled under FMPs. Currently, foreign fishing is allowed in only two of the FMPs—Commercial Tanner Crab off the Coast of Alaska and Groundfish of the Gulf of Alaska.

As of March 20, 1979, the FMPs listed below were in force.

Atlantic FMPs

Atlantic Groundfish Plan for Haddock, Cod, and Yellowtail Flounder (42 FR 14002, Mar. 14, 1977)

Atlantic Herring Fishery of the Northwestern Atlantic (43 FR 60479, Dec. 28, 1978)

Stone Crab Fishery of the Gulf of Mexico (44 FR 18031, Mar. 26,1979)

Surf Clam and Ocean Quahog Fisheries (42 FR 60439, Nov. 25, 1977)

Pacific FMPs

Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California (42 FR 2142, Apr. 26, 1977)

Northern Anchovy Fishery (43 FR 31655, July 21, 1978)

Groundfish of the Gulf of Alaska (43 FR 17242, Apr. 21, 1978)

Commercial Tanner Crab off the Coast of Alaska (43 FR 21175, May 16, 1978)

FOREIGN FISHING VESSEL PERMITS AND PERMIT FEES COLLECTED, BY COUNTRY AND BY ACTIVITY, 1977

Country	Catching vessels			Processing vessels			Other support vessels			Total		
	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees
		Tons	Dollars		Tons	Dollars		Tons	Dollars		Tons	Dollars
Bulgaria.	3	7,588	7,588	-	-	-	1	5,942	200	4	13,530	7,788
China, Taiwan . .	4	4,772	4,772	-	-	-	-	-	-	4	4,772	4,772
Cuba.	2	5,304	5,304	-	-	-	-	-	-	2	5,304	5,304
Federal Republic of Germany . . .	8	23,605	23,605	-	-	-	1	1,637	200	9	25,242	23,805
France.	1	2,413	2,413	-	-	-	-	-	-	1	2,413	2,413
German Democratic Republic	9	14,922	14,922	12	18,232	6,795	4	14,329	800	25	47,483	22,517
Italy	8	9,852	9,852	-	-	-	-	-	-	8	9,852	9,852
Japan	385	234,992	234,992	8	105,999	20,000	87	204,716	17,400	480	545,707	272,392
Poland.	11	24,830	24,830	-	-	-	2	12,568	400	13	37,398	25,230
Republic of Korea	27	61,147	61,147	-	-	-	3	5,161	600	30	66,308	61,747
Spain	80	31,550	31,550	-	-	-	-	-	-	80	31,550	31,550
USSR.	161	400,720	400,720	1	18,011	2,500	104	620,792	20,800	266	1,039,523	424,020
Total . . .	699	821,695	821,695	21	142,242	29,295	202	865,145	40,400	922	1,829,082	891,390

(1) Gross Registered Tonnage. (See Glossary.) Source:--NMFS, office of Resource Conservation and Management.

FOREIGN FISHING VESSEL PERMITS AND PERMIT FEES COLLECTED, BY COUNTRY AND BY ACTIVITY, 1978 (Preliminary)

Country	Catching vessels			Processing vessels			Other support vessels			Total		
	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees	Number	GRT (1)	Permit fees
		Tons	Dollars		Tons	Dollars		Tons	Dollars		Tons	Dollars
Bulgaria.	1	2,467	2,467	-	-	-	2	11,884	400	3	14,351	2,867
China, Taiwan . .	8	6,177	6,177	-	-	-	1	977	200	9	7,154	6,377
Cuba.	3	7,922	7,922	-	-	-	1	10,549	200	4	18,471	8,122
Federal Republic of Germany . . .	1	3,183	3,183	-	-	-	-	-	-	1	3,183	3,183
Italy	17	22,181	22,181	-	-	-	-	-	-	17	22,181	22,181
Japan	(2)444	254,409	241,055	8	105,999	20,000	138	336,526	27,600	590	696,934	288,655
Mexico.	22	12,009	12,009	-	-	-	-	-	-	22	12,009	12,009
Poland.	12	27,468	27,468	-	-	-	5	40,276	1,000	17	67,744	28,468
Republic of Korea	15	54,249	54,249	1	8,600	2,500	6	16,914	1,200	22	79,763	57,949
Romania	1	2,681	2,681	-	-	-	-	-	-	1	2,681	2,681
Spain	52	20,304	20,304	-	-	-	-	-	-	52	20,304	20,304
USSR.	116	302,745	302,745	1	18,011	2,500	95	513,413	19,000	212	834,169	324,245
Total . . .	692	715,795	702,441	10	132,610	25,000	248	930,539	49,600	950	1,778,944	777,041

(1) Gross Registered Tonnage. (See Glossary.) (2) Includes 90 Japanese longline vessels, 31,354 GRT, at a fee rate of $200 per vessel for a nonretention fishery (see 43 FR 59314). Source:--NMFS, Office of Resource Conservation and Management.

DOCKSIDE (EXVESSEL) PRICES USED TO COMPUTE POUNDAGE FEES CHARGED FOR FISH ALLOCATED TO FOREIGN NATIONS, 1977-79

Species	1977	1978	1979
	Dollars per metric ton		
Atlantic			
Butterfish	302	622	626
Hake:			
Red	156	185	199
Silver (whiting)	194	184	205
Herring:			
Herring, sea	73	87	200
River (alewives)	-	96	100
Mackerel	255	259	385
Sharks (except dogfish)	-	140	210
Other finfish	328	334	382
Squid:			
Short-finned	419	414	472
Long-finned	419	414	938
Pacific			
Atka mackerel	130	138	223
Cod, Pacific	251	282	359
Flounders	318	387	407
Hake, Pacific	34	32	176
Herring, sea:			
Roeless	161	100	100
With roe	161	100	991
Jack mackerel	93	110	110
Ocean perch, Pacific	-	280	356
Pollock, Alaska	98	84	176
Rockfishes	350	298	356
Sablefish:			
Longline caught	372	399	1,477
Trawl caught	372	399	551
Seamount groundfish	(1)614	172	397
Sharks (except dogfish)	-	134	396
Striped marlin	-	1,579	2,346
Swordfish	-	4,040	5,875
Other billfish	-	875	664
Other groundfish	45	48	49
Crabs, snow (tanner)	441	441	661
Snails (meats)	600	600	1,657
Squid	82	55	458

(1) Shown as armorheads in 42 FR 8177.

Note:--Poundage fee is computed at rate of 3.5 percent of dockside (exvessel) price.

Source:--Adapted from 42 FR 8177, February 9, 1977; 43 FR 19232, May 4, 1978; 43 FR 59313, December 19, 1978.

CATCH BY FOREIGN VESSELS AND POUNDAGE FEES PAID,
BY FISHING AREA AND SPECIES, MARCH 1 to DECEMBER 31, 1977

Fishing area and species	Catch (1)	Actual poundage fees paid (2)
	- Metric tons, round weight -	Dollars
Atlantic		
Butterfish	1,029.3	10,880
Hake:		
Red	3,180.1	17,363
Silver (whiting)	48,897.5	332,014
Herring, sea	300.9	770
Mackerel, Atlantic	402.4	3,593
Other finfish	8,557.5	98,240
Squid:		
Short-finned	19,227.7	282,070
Long-finned	11,544.1	169,352
Total	93,139.5	914,283
Pacific		
Atka mackerel	13,797.0	62,776
Cod, Pacific	36,965.0	324,922
Flounders	128,542.0	1,430,672
Hake, Pacific	116,743.0	138,924
Herring, sea	9,183.0	51,792
Jack mackerel	2,005.0	6,536
Pollock, Alaska	950,599.9	3,260,558
Rockfishes	29,538.0	361,840
Sablefish	18,444.9	240,153
Other groundfish	81,245.7	128,368
Crabs, snow (tanner)	12,497.0	192,954
Snails (meats)	404.0	8,484
Squid	6,595.0	18,928
Total	1,406,559.5	6,226,908
Grand total	1,499,699.0	7,141,191

(1) Catch for March-December 1977 as reported by foreign nations and agreed upon by U.S. officials for purposes of levying poundage fees.

(2) The poundage fee for each allocated species was based on the catch as described in footnote one and calculated at the rate of 3.5 percent of the actual price paid to U.S. fishermen with the fee per ton rounded up to the nearest cent. A total of $10,160,015 was charged to foreign governments at the beginning of 1977, and $3,018,824 was refunded, because foreign fishing vessels were unable to catch all of the fish or shellfish allocated to them. No fees were levied against Canada. Mexico and Romania did not fish in the U.S. FCZ in 1977.

Note:--Table may not add because of rounding.

Source:--NMFS, Office of Resource Conservation and Management.

FOREIGN FISHING ALLOCATIONS AND POUNDAGE FEES COLLECTED IN ADVANCE, BY FISHING AREA AND SPECIES, 1978

Fishing area and species	Final allocations (1)	Poundage fees collected in advance (2)
	- Metric tons, round weight -	Dollars
Northwest Atlantic:		
Butterfish	3,808	82,900
Hake:		
Red	26,378	170,929
Silver (whiting)	47,809	307,890
Herring, river (alewives)	446	1,499
Mackerel, Atlantic	1,180	10,703
Other finfish	41,707	487,555
Squid:		
Short-finned	31,774	460,405
Long-finned	21,230	307,623
Total	174,332	1,829,504
Washington, Oregon, and California:		
Hake, Pacific	118,200	132,384
Jack mackerel	3,900	15,015
Flounders	118	1,599
Rockfishes, all	945	9,856
Sablefish	119	1,662
Other groundfish	591	993
Total	123,873	161,510
Gulf of Alaska:		
Atka mackerel	24,700	119,301
Cod, Pacific	22,700	224,049
Flounders	23,700	321,135
Ocean perch, Pacific	22,900	224,420
Pollock, Alaska	145,100	426,594
Rockfishes, other	5,376	56,072
Sablefish	9,900	138,303
Other groundfish	15,200	25,536
Squid	1,450	2,798
Total	271,026	1,538,208
Bering Sea and Aleutian Islands:		
Atka mackerel	24,800	119,784
Cod, Pacific	70,000	690,900
Flounders	285,000	3,861,750
Herring, sea	8,670	30,345
Ocean perch, Pacific	21,500	210,700
Pollock, Alaska	950,000	2,793,000
Sablefish	4,400	61,468
Other groundfish	100,600	169,008
Crabs, snow (tanner)	15,000	231,600
Snails (meats)	3,000	63,000
Squid	10,800	20,844
Total	1,493,770	8,252,399
Western Pacific:		
Seamount groundfish	1,000	6,020
Grand total	2,064,001	11,787,640

(1) Final allocations as shown on this table are for purposes of computing poundage fees collected in advance and may not agree with final allocations shown elsewhere.
(2) Poundage fees are collected in advance, and are based on the allocation, which is multiplied by 3.5 percent of the price per ton received by U.S. fishermen with the fee per ton rounded to the nearest cent. Final determination of fees will be based on catch as reported by foreign nations and agreed upon by U.S. officials.

Note:--Totals may not add because of rounding.

Source:--NMFS, Office of Resource Conservation and Management.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN ALLOCATIONS:
BY COUNTRY AND REGION, 1978
(FINAL)

Item	North Atlantic	Washington, Oregon, and California	Gulf of Alaska	Bering Sea and Aleutian Islands	Seamount	Total
	Metric tons, round weight					
Optimum yield (OY)	(1)516,150	246,200	333,500	1,559,751	2,000	2,657,601
U.S. capacity	(1)334,800	120,399	49,500	65,381	0	570,080
Reserve	0	0	1,400	600	0	2,000
TALFF	181,350	125,801	282,600	1,493,770	2,000	2,085,521
Country allocations						
Bulgaria	(2) 12	0	0	0	0	(2) 12
China, Taiwan	0	0	0	6,285	0	6,285
Cuba	(3) 0	0	0	0	0	0
EEC:						
Federal Republic of Germany	(3) 0	0	0	0	0	0
France	(3) 0	0	0	0	0	0
Italy	8,696	0	0	0	0	8,696
German Democratic Republic	(3) 0	0	0	0	0	0
Japan	18,498	0	101,785	1,129,025	1,000	1,250,308
Mexico	16,473	1,928	10,874	0	0	29,275
Poland	(3) 0	31,314	22,387	0	0	53,701
Republic of Korea	0	0	43,698	69,755	0	113,453
Romania	1,813	0	0	0	0	1,813
Spain	22,340	0	0	0	0	22,340
USSR	98,078	92,559	103,156	288,705	1,000	583,498
Unallocated	(4) 15,440	0	700	0	0	16,140

(1) Includes Atlantic herring which had a TALFF in 1977.
(2) Other allocations were returned to the United States.
(3) All allocations were returned to the United States.
(4) Includes 300 metric tons caught by Canadian vessels in the disputed area (the northeast part of ICNAF Subarea 5ZE). (See Glossary.)

Note:--TALFF = OY minus U.S. capacity minus Reserve. (See Glossary.) Table only includes species for which there was a foreign fishery. Species prohibited to foreign fishing are not included.

Source:--OY, U.S. capacity, Reserve, TALFF--Office of Resource Conservation and Management.
Country allocations--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
NORTH ATLANTIC AND GULF OF MEXICO, BY SPECIES AND COUNTRY, 1978
(FINAL)

Item	Directed fisheries					Incidental catch				Total
	Silver hake	Red hake	Short-finned squid	Long-finned squid	Sharks, except dogfish	Atlantic mackerel	River herring (1)	Butterfish (2)	Other finfish	
	Metric tons, round weight									
Optimum yield	97,000	36,500	35,000	44,000	6,150	15,500	10,000	18,000	247,000	(3)516,150
U.S. capacity	46,600	9,100	6,000	23,100	5,000	14,300	9,500	14,000	200,200	(3)334,800
Reserve	0	0	0	0	0	0	0	0	0	0
TALFF	50,400	27,400	29,000	20,900	1,150	1,200	500	4,000	46,800	181,350
Country allocations										
Bulgaria	1	0	0	0	0	11	0	0	0	(4)12
Canada	No allocations have been made to date.									
Cuba	Allocations were returned.									
EEC:										
Federal Rep. of Germany	Allocations were returned.									
France	Allocations were returned.									
Italy	1,503	150	2,762	2,422	0	128	12	501	1,218	8,696
German Democratic Republic	Allocations were returned.									
Japan	2,291	639	6,253	6,088	0	56	23	672	2,476	18,498
Mexico	720	72	4,000	6,000	0	105	44	1,263	4,269	16,473
Poland	Allocations were returned.									
Romania	906	91	100	150	0	35	7	150	374	1,813
Spain	772	77	9,515	5,860	0	125	52	1,053	4,886	22,340
USSR	40,422	25,275	4,730	380	0	672	279	100	26,220	98,078
Unallocated	3,785	1,096	1,640	0	1,150	68	83	261	7,357	15,440

(1) Includes alewife, blueback herring, and hickory shad.
(2) Allocated by country in proportion to long-finned squid fishery.
(3) Includes 7,000 metric tons of Atlantic herring.
(4) Other allocations were returned.

Note:--Includes 300 metric tons caught by Canadian vessels in the disputed area (the northeast part of ICNAF Subarea 5ZE). (See Glossary.)

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1978
(FINAL)

Item	Directed fisheries		Incidental catch				Total
	Pacific hake	Jack mackerel	Flounders (1)	Rockfishes (2)	Sablefish (1)	Other species (3)	
	Metric tons, round weight						
Optimum yield (OY)	130,000	55,000	31,000	19,000	7,000	4,200	246,200
U.S. capacity	10,000	51,000	30,880	18,040	6,879	3,600	120,399
Reserve	0	0	0	0	0	0	0
TALFF	120,000	4,000	120	960	121	600	125,801
Mexico	1,800	100	2	15	2	9	1,928
Poland	28,930	1,950	29	231	29	145	31,314
USSR	89,270	1,950	89	714	90	446	92,559

(1) 0.1% of hake TALFF.
(2) 0.8% of hake TALFF.
(3) 0.5% of hake TALFF.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
GULF OF ALASKA, BY SPECIES AND COUNTRY, 1978 FISHING YEAR
(DECEMBER 1, 1977 to OCTOBER 31, 1978)
(FINAL)

Item	Directed fisheries								Incidental catch	Total
	Alaska pollock	Pacific ocean perch	Other rockfishes	Flounders	Sablefish	Atka mackerel	Pacific cod	Squid	Other species	
	Metric tons, round weight									
Optimum yield	168,800	25,000	7,600	33,500	15,000	24,800	40,600	2,000	16,200	333,500
U.S. capacity	17,700	1,100	2,000	9,200	4,000	0	15,500	0	0	49,500
Reserve	0	0	0	0	800	0	0	100	500	1,400
TALFF	151,100	23,900	5,600	24,300	10,200	24,800	25,100	1,900	15,700	282,600
Country allocations										
Japan	40,740	6,448	1,510	21,370	8,750	2,000	14,722	1,155	5,090	101,785
Mexico	6,000	1,000	224	100	100	100	2,400	450	500	10,874
Poland	15,840	2,428	636	100	50	1,030	798	50	1,455	22,387
Rep. of Korea	31,810	5,001	1,185	200	1,000	100	1,662	145	2,595	43,698
USSR	56,710	9,023	2,045	2,030	100	21,570	5,518	100	6,060	103,156
Unallocated	0	0	0	500	200	0	0	0	0	700

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
BERING SEA AND ALEUTIAN ISLANDS, BY SPECIES AND COUNTRY, 1978
(FINAL)

Item	Directed fisheries							
				Pacific ocean perch		Sablefish (1)		
	Alaska pollock	Yellowfin sole	Other flounders	Bering Sea	Aleutians	Bering Sea	Aleutians	Pacific cod
	Metric tons, round weight							
Optimum yield	950,000	126,000	159,000	6,500	15,000	3,000	1,500	70,500
U.S. capacity	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	100	0	500
TALFF	950,000	126,000	159,000	6,500	15,000	(1)2,900	(1)1,500	70,000
Country allocations								
China, Taiwan	5,000	150	150	25	50	75	40	150
Japan	792,300	68,700	100,790	3,100	6,200	2,340	1,170	49,680
Rep. of Korea	60,000	200	710	300	700	210	125	2,520
USSR	92,700	56,950	57,350	3,075	8,050	275	165	17,650

Item	Directed fisheries					Incidental catch		Total
						Other species		
	Herring	Atka mackerel	Squid	Snails (meats)	Snow (tanner) crabs	Bering Sea	Aleutians	
	Metric tons, round weight							
Optimum yield	18,670	24,800	10,800	3,000	70,381	66,600	34,000	1,559,751
U.S. capacity	10,000	0	0	0	55,381	0	0	65,381
Reserve	0	0	0	0	0	0	0	600
TALFF	8,670	24,800	10,800	3,000	15,000	66,600	34,000	1,493,770
Country allocations								
China, Taiwan	10	100	60	0	0	340	135	6,285
Japan	2,580	2,000	10,350	3,000	15,000	45,915	25,900	1,129,025
Rep. of Korea	20	100	270	0	0	3,000	1,600	69,755
USSR	6,060	22,600	120	0	0	17,345	6,365	288,705

(1) For trawl, longline, and trap gear, collectively.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
WESTERN PACIFIC SEAMOUNT GROUNDFISH FISHERY,
BY SPECIES AND COUNTRY, 1978
(FINAL)

Item	Directed fisheries
	Pelagic armorheads, alfonsins, and other groundfish (1)
	Metric tons, round weight
Optimum yield	2,000
U.S. capacity	0
Reserve	0
TALFF	(1) 2,000
Country allocations	
Japan	1,000
China, Taiwan	1,000

(1) The TALFF for armorheads, alfonsins, and other groundfish resources is subject to additional restrictions on total effort by foreign fishing vessels. No more than 50 vessel days of trawling and 50 vessel days of bottom longlining will be allowed in this fishery.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN ALLOCATIONS, BY COUNTRY AND REGION, 1979
(AS OF APRIL 30, 1979)

Item	North Atlantic and Gulf of Mexico	Washington, Oregon, and California	Gulf of Alaska	Bering Sea and Aleutian Islands	Seamount	Total
	Metric tons, round weight					
Optimum yield (OY)	(1)519,450	315,100	325,700	1,497,626	2,000	2,659,876
U.S. capacity	(1)340,200	159,499	44,500	63,556	0	607,755
Reserve	0	41,570	135,323	2,100	0	178,993
TALFF	179,250	114,031	145,877	1,431,970	2,000	1,873,128
Country allocations						
Bulgaria	1,905	0	0	0	0	1,905
Canada	No allocations have been made to date.					
China, Taiwan	0	0	0	6,243	1,000	7,243
Cuba	6,989	0	0	0	0	6,989
EEC:						
Federal Republic of Germany	1,908	0	0	0	0	1,908
France	1,668	0	0	0	0	1,668
Italy	4,423	0	0	0	0	4,423
German Democratic Republic	1,693	0	0	0	0	1,693
Japan	10,385	0	47,173	1,062,335	1,000	1,120,893
Mexico	16,234	0	29,292	0	0	45,526
Poland	5,598	0	4,617	31,088	0	41,303
Republic of Korea	0	0	14,341	105,724	0	120,065
Romania	1,703	0	0	0	0	1,703
Spain	18,547	0	0	0	0	18,547
USSR	72,219	0	50,454	224,080	0	346,753
Unallocated	35,978	114,031	0	2,500	0	152,509

(1) Includes Atlantic herring which had a TALFF in 1977.

Note:--TALFF = OY minus U.S. capacity minus Reserve. (See Glossary.) Table only includes species for which there is a foreign fishery. Species prohibited to foreign fishing are not included, except as noted.

Source:--OY, U.S. capacity, Reserve, and TALFF--Office of Resource Conservation and Management.
Country allocations--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF AND FOREIGN FISHING ALLOCATIONS:
NORTH ATLANTIC AND GULF OF MEXICO, BY SPECIES AND COUNTRY, 1979
(AS OF APRIL 30, 1979)

Item	Directed fisheries					Incidental catch				Total
	Silver hake	Red hake	Short-finned squid	Long-finned squid	Sharks, except dogfish	Atlantic mackerel	River herring (1)	Butterfish (2)	Other finfish	
	Metric tons, round weight									
Optimum yield	98,800	32,000	30,000	44,000	6,150	15,500	10,000	18,000	247,000	(3)519,450
U.S. capacity	46,600	8,600	10,000	14,000	5,000	14,300	9,500	14,000	200,200	(3)340,200
Reserve	0	0	0	0	0	0	0	0	0	0
TALFF	52,200	23,400	20,000	30,000	1,150	1,200	500	4,000	46,800	179,250
Country allocations										
Bulgaria	1,000	102	200	75	0	11	10	12	495	1,905
Canada	No allocations have been made to date.									
Cuba	3,440	1,400	75	75	0	46	20	48	1,885	6,989
EEC:										
Federal Rep. of Germany	200	100	75	1,000	0	10	10	100	413	1,908
France	75	75	1,000	75	0	10	10	10	413	1,668
Italy	338	174	980	1,640	0	25	10	174	1,082	4,423
German Democratic Republic	1,000	100	75	75	0	10	10	10	413	1,693
Japan	1,500	381	2,069	3,241	0	63	25	358	2,748	10,385
Mexico (4)	1,240	640	3,450	6,000	0	96	40	640	4,128	16,234
Poland	1,000	127	2,759	75	0	35	14	37	1,551	5,598
Romania	1,000	100	75	75	0	20	10	10	413	1,703
Spain	1,155	661	5,863	5,493	0	107	46	606	4,616	18,547
USSR	31,322	15,592	3,104	476	0	471	197	497	20,560	72,219
Unallocated	8,930	3,948	275	11,700	1,150	296	98	1,498	8,083	35,978

(1) Includes alewife, blueback herring, and hickory shad.
(2) Allocated by country in proportion to long-finned squid fishery.
(3) Includes Atlantic herring of 18,000 metric tons in 1979 which had a TALFF in 1977.
(4) Eighty percent of initial allocation was reserved for all species except long-finned squid for which 70 percent was reserved.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1979
(AS OF APRIL 30, 1979)

Item	Directed fisheries	Incidental catch					Total
	Pacific hake	Jack mackerel	Flounders	Rockfishes (1)	Sablefish	Other species	
	Metric tons, round weight						
Optimum yield (OY)	198,900	55,000	31,000	19,000	7,000	4,200	315,100
U.S. capacity	50,000	50,533	30,851	17,809	6,851	3,455	159,499
Reserve	39,780	1,193	40	318	40	199	41,570
TALFF	109,120	(2)3,274	(3)109	(4)873	(3)109	(5)546	114,031
Canada	No allocations have been made to date.						
Mexico	No allocations have been made to date.						
Poland	No allocations have been made to date.						
USSR	No allocations have been made to date.						
Unallocated	No allocations have been made to date.						

(1) OY includes 1,000 metric tons Pacific ocean perch; U.S. capacity includes 929 metric tons of Pacific ocean perch; and reserve includes 19 metric tons of Pacific ocean perch.
(2) 3.0 percent of the hake TALFF.
(3) 0.1 percent of the hake TALFF.
(4) 0.8 percent of the hake TALFF. Catch of Pacific ocean perch may not exceed 52 tons or 0.048 percent of the hake TALFF.
(5) 0.5 percent of the hake TALFF.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
GULF OF ALASKA, BY SPECIES AND COUNTRY,
1979 FISHING YEAR (DECEMBER 1, 1978 to OCTOBER 31, 1979)
(AS OF APRIL 30, 1979)

Item	Directed fisheries								Incidental catch	Total
	Alaska pollock	Pacific ocean perch	Other rockfishes	Flounders	Sablefish	Atka mackerel	Pacific cod	Squid	Other species	
	Metric tons, round weight									
Optimum yield	168,800	25,000	7,600	33,500	13,000	24,800	34,800	2,000	16,200	325,700
U.S. capacity	14,200	1,100	2,000	7,200	4,000	0	15,500	0	500	44,500
Reserve	100,350	5,925	2,625	7,275	3,250	4,125	7,498	750	3,525	135,323
TALFF	54,250	17,975	2,975	19,025	5,750	20,675	11,802	1,250	12,175	145,877
Country allocations										
Japan	10,133	4,631	806	17,058	4,950	1,643	4,700	115	3,137	47,173
Mexico (1)	20,000	2,089	273	100	100	100	4,400	800	1,430	29,292
Poland	1,391	1,034	154	120	50	819	200	105	744	4,617
Rep. of Korea	6,999	3,355	560	125	550	115	300	110	2,227	14,341
USSR	15,727	6,866	1,182	1,622	100	17,998	2,202	120	4,637	50,454

(1) Eighty percent of the initial allocation for each species was reserved.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS
BERING SEA AND ALEUTIAN ISLANDS, BY SPECIES AND COUNTRY, 1979
(AS OF APRIL 30, 1979)

Item	Directed fisheries							
				Pacific ocean perch		Sablefish		
	Alaska pollock	Yellowfin sole	Other flounders	Bering Sea	Aleutians	Bering Sea	Aleutians	Pacific cod
	Metric tons, round weight							
Optimum yield	950,000	106,000	139,000	6,500	15,000	3,000	1,500	58,000
U.S. capacity	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	600	0	1,500
TALFF	950,000	106,000	139,000	6,500	15,000	(1)2,400	(1)1,500	56,500
Country allocations								
China, Taiwan	5,000	150	150	25	50	30	20	100
Japan	774,630	61,910	81,842	3,090	6,190	1,480	920	35,690
Poland	25,000	750	750	75	175	150	100	500
Rep. of Korea	85,000	2,600	2,600	300	700	370	230	1,600
USSR	60,370	40,590	53,658	3,010	7,885	370	230	16,110
Unallocated	0	0	0	0	0	0	0	2,500

Item	Directed fisheries					Incidental catch		Total
						Other species		
	Herring	Atka mackerel	Squid	Snails (meats)	Snow (tanner) crabs	Bering Sea	Aleutians	
	Metric tons, round weight							
Optimum yield	18,670	24,800	10,000	3,000	68,556	59,600	34,000	1,497,626
U.S. capacity	10,000	0	0	0	53,556	0	0	63,556
Reserve	0	0	0	0	0	0	0	2,100
TALFF	8,670	24,800	10,000	3,000	15,000	59,600	34,000	1,431,970
Country allocations								
China, Taiwan	25	100	100	0	0	316	177	6,243
Japan	2,413	2,000	5,900	3,000	15,000	43,390	24,880	1,062,335
Poland	125	500	500	0	0	1,574	889	31,088
Rep. of Korea	450	1,750	1,750	0	0	5,360	3,014	105,724
USSR	5,657	20,450	1,750	0	0	8,960	5,040	224,080
Unallocated	0	0	0	0	0	0	0	2,500

(1) For trawl, longline, and trap gear, collectively.

Source:--U.S. Department of State, Office of Fisheries Affairs.

OPTIMUM YIELD, U.S. CAPACITY, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS:
WESTERN PACIFIC SEAMOUNT GROUNDFISH FISHERY,
BY SPECIES AND COUNTRY, 1979
(AS OF APRIL 30, 1979)

Item	Directed fisheries
	Pelagic armorheads, alfonsins, and other groundfish (1)
	- - - - - - Metric tons, round weight - - - - - -
Optimum yield	2,000
U.S. capacity	0
Reserve	0
TALFF	(1) 2,000
Country allocations	
Japan	1,000
China, Taiwan	1,000

(1) The TALFF for armorheads, alfonsins, and other groundfish resources is subject to additional restrictions on total effort by foreign fishing vessels. No more than 50 vessel days of trawling and 50 vessel days of bottom longlining will be allowed in this fishery.

Source:--U.S. Department of State, Office of Fisheries Affairs.

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1977 AND 1978 (1)

Species	1977		1978		5-year average (1973-77)
Fish	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Alewives:					
Atlantic and Gulf	13,816	627	12,696	556	19,987
Great Lakes	39,246	409	42,279	702	39,273
Anchovies	231,932	17,683	35,380	5,545	254,562
Bluefish	11,320	1,315	11,563	1,613	10,615
Bonito	23,245	3,734	8,894	1,932	22,935
Butterfish	3,043	864	8,081	2,906	3,596
Cod:					
Atlantic	75,533	17,095	86,737	21,516	59,317
Pacific	10,948	1,781	10,710	2,258	10,712
Croaker	34,401	3,891	32,961	5,093	28,049
Cusk	2,728	462	3,385	616	2,916
Flounders:					
Atlantic and Gulf:					
Blackback	34,932	12,542	25,300	10,990	20,589
Fluke	19,562	10,170	18,692	11,790	16,791
Yellowtail	36,457	17,092	25,172	15,165	47,580
Other	26,180	9,988	48,746	21,433	25,174
Pacific	52,472	9,685	62,810	13,384	55,222
Total	169,603	59,477	180,720	72,762	165,356
Groupers	6,856	3,955	6,633	4,643	7,559
Haddock	28,430	9,270	39,488	12,669	14,790
Hake:					
Pacific	3,600	70	7,267	188	3,596
Red	3,866	349	4,841	538	3,443
White	10,894	1,394	10,909	1,697	8,406
Halibut	17,688	17,340	17,677	18,527	20,865
Herring, sea:					
Atlantic	111,612	4,967	111,310	6,724	86,325
Pacific	44,235	6,642	43,087	10,505	47,336
Jack mackerel	110,246	5,512	68,000	3,740	46,347
Lingcod	7,545	1,252	6,588	1,450	8,293
Mackerel:					
Atlantic	3,003	525	3,558	776	3,995
King	8,460	3,654	5,528	3,505	8,055
Pacific	10,246	512	24,563	1,351	2,233
Spanish	12,021	2,559	7,297	1,367	11,659
Menhaden:					
Atlantic	809,641	28,974	786,466	20,233	747,342
Gulf	986,474	39,155	1,808,547	78,039	1,158,069
Total	1,796,115	68,129	2,595,013	98,272	1,905,411
Mullet	21,884	4,010	31,824	5,591	30,720
Ocean perch:					
Atlantic	35,028	5,355	35,578	6,093	38,879
Pacific	5,695	781	5,391	1,003	5,582
Pollock:					
Atlantic	28,772	4,080	39,055	6,579	21,614
Alaska	712	57	3,892	220	264
Rockfishes	43,512	7,462	59,409	12,760	38,717
Sablefish	25,376	4,747	29,188	8,337	18,023
Salmon, Pacific:					
Chinook or king	32,676	44,961	29,776	39,828	32,253
Chum or keta	57,398	24,103	50,485	30,885	47,629

See footnotes at end of table. (Continued)

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1977 AND 1978 (1) - Continued

Species	1977		1978		5-year average (1973-77)
Fish - continued	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Salmon, Pacific - cont.:					
Pink	125,644	50,790	194,873	64,496	74,528
Red or sockeye	89,932	69,808	98,707	82,978	64,979
Silver or coho	29,992	32,201	30,648	36,350	34,613
Total	335,642	221,863	404,489	254,537	254,002
Scup or porgy	19,112	3,819	21,547	5,648	15,740
Sea bass:					
Black	5,861	2,026	4,978	2,201	4,641
White	964	820	900	855	931
Sea trout:					
Gray	18,695	2,868	21,417	4,386	17,782
Spotted	3,694	1,769	4,261	2,447	7,096
White	767	116	1,177	214	1,886
Sharks:					
Dogfish	6,928	477	7,991	761	(2)
Other	1,262	189	1,742	335	2,902
Snapper:					
Red	6,411	7,067	5,577	6,409	8,386
Other	1,777	1,289	2,946	2,859	2,467
Striped bass	5,140	3,460	4,497	4,664	9,132
Tuna:					
Albacore	31,687	18,598	37,308	22,598	43,424
Bigeye	1,280	1,046	1,283	630	(2)
Bluefin	16,969	6,602	13,690	6,853	19,845
Little	115	27	150	70	68
Skipjack	91,403	33,006	151,596	60,980	84,504
Yellowfin	202,834	76,393	203,594	85,665	243,363
Unclassified	941	113	1,257	153	207
Total	345,229	135,785	408,878	176,949	392,411
Warsaw	235	82	160	65	189
Whiting	45,316	4,224	51,074	7,188	41,464
Wolffish	997	88	1,447	162	877
Other marine finfishes:					
Atlantic and Gulf	203,864	33,755	208,771	47,679	-
Pacific	27,153	7,202	31,927	9,238	-
Other freshwater finfishes	81,423	19,628	84,115	22,763	-
Total	4,062,081	706,487	4,857,396	871,394	-
Shellfish et al.					
Clams:					
Hard	15,433	28,234	13,295	29,738	15,040
Ocean quahog	18,549	5,524	22,965	6,707	5,528
Soft	10,683	14,009	10,091	13,486	9,723
Surf	51,036	26,442	39,237	20,901	73,121
Other	459	74	2,123	3,299	544
Total	96,160	74,283	87,711	74,131	103,956
Crabs:					
Blue, hard	128,860	27,454	138,230	28,180	132,489
Dungeness	60,375	25,790	39,251	28,448	28,590
King	99,449	111,742	130,238	168,066	94,988
Snow (tanner)	98,329	30,823	129,506	52,556	70,304
Other	11,526	6,698	11,917	7,782	9,481
Total	398,539	202,507	449,142	285,032	335,852

See footnotes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1977 AND 1978 (1) - Continued

Species	1977		1978		5-year average (1973-77)
Shellfish et al. - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Lobsters:					
American	31,708	57,715	34,419	64,645	30,236
Spiny	5,483	9,607	4,629	9,709	8,099
Oysters	46,026	52,537	50,983	60,897	51,150
Scallops:					
Bay	1,703	4,426	1,371	4,166	1,599
Calico	1,111	1,026	948	1,301	1,410
Sea	25,012	40,584	30,976	76,346	13,551
Shrimp:					
New England	840	459	7	1	10,600
South Atlantic	17,997	24,852	20,138	30,878	24,138
Gulf	265,903	296,785	248,327	319,590	202,896
Pacific	191,905	33,031	154,403	35,017	158,413
Other	9	31	6	21	11
Total	476,654	355,158	422,881	385,507	396,058
Squid:					
Atlantic	5,469	1,426	3,739	1,453	5,565
Pacific	19,410	679	37,401	3,432	20,895
Other shellfish	28,744	8,665	46,104	16,487	-
Total shellfish et al.	1,136,019	808,613	1,170,304	983,106	-
Grand total	5,198,100	1,515,100	6,027,700	1,854,500	-

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).
(2) Data not available.
Note:--Data are preliminary; they do not include landings by U.S.-flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include products of aquaculture.

U.S. COMMERCIAL LANDINGS, BY REGIONS, 1977 AND 1978 (1)

Region	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
New England	581,247	202,786	660,717	256,510
Middle Atlantic	213,387	69,797	200,603	78,591
Chesapeake	668,843	86,138	598,618	94,179
South Atlantic	345,315	71,726	398,940	96,276
Gulf	1,476,392	404,685	2,286,998	473,227
Pacific Coast	1,776,968	650,519	1,740,855	820,632
Great Lakes and other inland waters	120,669	20,037	126,394	23,465
Hawaii	15,279	9,412	14,575	11,620
Total	5,198,100	1,515,100	6,027,700	1,854,500

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).
Note:--Data are preliminary; they do not include landings by U.S.-flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include products of aquaculture.

U.S. COMMERCIAL LANDINGS

U.S. COMMERCIAL LANDINGS, BY STATES, 1977 AND 1978 (1)

State	1977		1978		Record landings	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Year	Thousand pounds
Alabama (2)	36,158	37,244	31,553	35,922	1973	39,749
Alaska	644,014	326,245	745,586	438,616	1936	932,341
Arkansas (3)	6,423	1,999	6,495	2,055	-	(4)
California	874,376	194,957	722,311	228,238	1936	1,760,183
Connecticut	3,694	2,379	5,053	4,368	1930	88,012
Delaware	2,020	778	1,056	500	1953	367,500
Florida	167,827	95,485	171,462	97,519	1938	241,443
Georgia	13,270	9,096	17,493	14,567	1927	47,607
Hawaii	15,279	9,412	14,575	11,620	1954	20,610
Idaho	391	38	400	35	-	(4)
Illinois	5,293	931	3,556	826	-	(4)
Indiana	225	118	162	106	-	(4)
Iowa	5,288	891	3,730	820	-	(4)
Kansas	29	8	22	7	-	(4)
Kentucky (3)	2,742	820	2,966	923	-	(4)
Louisiana	917,523	137,936	1,673,922	190,167	1978	1,673,922
Maine	182,187	61,997	190,203	68,833	1950	356,266
Maryland	60,399	30,787	59,726	33,557	1890	141,607
Massachusetts	319,292	114,017	376,878	152,251	1948	649,696
Michigan	11,626	3,275	11,158	3,529	1930	35,580
Minnesota	9,136	1,283	9,043	1,822	-	(4)
Mississippi	316,627	26,341	377,534	28,291	1971	400,576
Missouri	846	149	863	152	-	(4)
Nebraska	124	21	134	45	-	(4)
New Hampshire	4,001	1,473	4,862	1,750	-	(4)
New Jersey	178,637	38,480	163,685	44,432	1956	540,060
New York	33,242	30,790	36,340	33,870	1880	335,000
North Carolina	251,258	28,855	299,536	40,607	1959	342,612
North Dakota	723	79	635	87	-	(4)
Ohio	7,740	1,978	9,515	2,563	1936	31,083
Oklahoma (3)	2,153	503	2,150	570	-	(4)
Oregon	112,503	48,532	134,657	56,600	1978	134,657
Pennsylvania	403	246	426	257	-	(4)
Rhode Island	72,073	22,920	83,721	29,308	1889	128,056
South Carolina	16,318	9,497	20,610	16,031	1965	26,611
South Dakota	2,686	288	2,840	314	-	(4)
Tennessee (3)	5,384	1,249	8,839	2,437	-	(4)
Texas	111,898	134,237	103,524	148,901	1960	237,684
Virginia	608,444	55,351	538,892	60,622	1972	666,180
Washington	146,075	80,785	138,301	97,178	1941	197,253
West Virginia	23	7	68	18	-	(4)
Wisconsin	49,750	3,623	53,218	4,186	-	(4)
Total	5,198,100	1,515,100	6,027,700	1,854,500	1978	6,027,700

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).
(2) Landings in interior waters estimated.
(3) Estimated.
(4) Not determined.

Note:--Data are preliminary; they do not include landings by U.S.-flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include products of aquaculture.

COMMERCIAL FISHERY LANDINGS AT CERTAIN U.S. PORTS, 1976-78

Port	Quantity			Port	Value		
	1976	1977	1978		1976	1977	1978
	Million pounds				Million dollars		
Cameron, La.	385.3	306.7	606.0	Dutch Harbor, Alaska	48.3	61.4	99.7
Pascagoula-Moss Point, Miss.	218.6	272.2	334.8	Kodiak, Alaska	38.0	72.5	92.6
San Pedro, Calif.	650.9	519.5	312.8	San Pedro, Calif.	117.1	109.1	92.1
Dulac-Chauvin, La.	236.9	153.7	300.2	San Diego, Calif.	30.0	43.4	69.8
Empire-Venice, La.	214.0	190.5	292.8	New Bedford, Mass.	39.2	43.2	54.6
Gloucester, Mass.	144.2	150.9	185.1	Dulac-Chauvin, La.	32.8	33.1	46.7
Kodiak, Alaska	151.4	179.6	177.4	Brownsville-Port Isabel, Tex.	33.0	42.0	43.0
San Diego, Calif.	100.7	124.1	168.3	Aransas Pass-Rockport, Tex.	28.0	39.0	39.0
Dutch Harbor, Alaska	91.3	100.5	125.8	Cameron, La.	21.7	18.9	34.2
Beaufort-Morehead City, N.C.	79.1	100.7	108.7	Gloucester, Mass.	16.5	21.5	28.9
New Bedford, Mass.	64.9	75.5	71.9	Freeport, Tex.	23.0	26.0	28.0
Ketchikan, Alaska	(1)	54.8	55.7	Ketchikan, Alaska	(1)	23.9	26.4
Pt. Judith, R.I.	(1)	(1)	55.3	Empire-Venice, La.	16.7	18.0	26.4
Cape May-Wildwood, N.J.	39.2	48.6	47.7	Cape May-Wildwood, N.J.	14.6	20.7	25.1
Portland, Maine.	27.3	30.4	45.9	Bayou La Batre, Ala.	21.5	25.7	25.1
Astoria, Oreg.	28.5	28.5	45.6	Hampton-Norfolk, Va.	6.2	9.1	24.3
Eureka, Calif.	35.5	48.7	44.4	Key West, Fla.	14.6	18.0	22.4
Rockland, Maine	(1)	(1)	40.1	Akutan, Alaska	(1)	15.9	21.2
Bellingham, Wash.	(1)	33.0	38.0	Astoria, Oreg.	10.1	10.0	20.1
Biloxi, Miss.	63.0	42.1	37.8	Eureka, Calif.	13.3	17.0	19.5
Newport, Oreg.	14.0	23.3	33.1	Pascagoula-Moss Point, Miss.	12.5	17.6	19.4
Hampton-Norfolk, Va.	12.1	18.7	31.2	Golden Meadow-Leeville, La.	15.8	18.5	19.1
Petersburg, Alaska	(1)	33.6	31.0	Petersburg, Alaska	(1)	20.0	17.5
Westport, Wash.	(1)	27.0	30.0	Delcambre, La.	8.8	10.7	16.7
Boston, Mass.	23.3	22.2	27.3	Bellingham, Wash.	(1)	14.5	15.3
Charleston-Coos Bay, Oreg.	17.8	23.4	27.1	Apalachicola, Fla.	6.8	5.5	13.3
Brownsville-Port Isabel, Tex.	22.0	28.0	24.0	Ft. Myers, Fla.	6.7	8.0	13.1
Aransas Pass-Rockport, Tex.	20.0	25.0	23.0	Westport, Wash.	(1)	13.0	12.5
Bayou La Batre, Ala.	26.4	25.1	22.2	Lafitte-Barataria, La.	13.4	12.7	11.5
Golden Meadow-Leeville, La.	25.6	23.5	22.1	Newport, R.I.	10.0	9.2	10.7
Wanchese, N.C.	(1)	(1)	20.5	Newport, Oreg.	5.4	9.3	10.6
Provincetown, Mass.	(1)	17.9	19.9	Bon Secour-Gulf Shores, Ala.	8.3	10.1	10.0
Akutan, Alaska	(1)	20.8	17.2	Pt. Judith, R.I.	(1)	(1)	9.5
Newport, R.I.	23.6	18.4	16.8	Charleston-Coos Bay, Oreg.	8.9	9.4	9.2
Seattle, Wash.	(1)	15.3	16.3	Provincetown, Mass.	(1)	6.9	9.1
Freeport, Tex.	15.0	17.0	16.0	Wanchese, N.C.	(1)	(1)	8.5
Point Pleasant, N.J.	12.5	14.1	15.7	Boston, Mass.	6.8	6.0	8.1
Ft. Myers, Fla.	5.2	6.0	15.2	Portland, Maine.	3.4	4.7	7.5
Delcambre, La.	9.2	11.4	15.1	Ocean City, Md.	5.0	5.9	6.9
Key West, Fla.	13.8	15.0	15.0	Biloxi, Miss.	7.4	6.7	6.5
Ocean City, Md.	10.3	12.0	14.4	Seattle, Wash.	(1)	6.2	6.3
Lafitte-Barataria, La.	18.7	18.3	13.1	Beaufort-Morehead City, N.C.	5.0	4.5	6.2
Chincoteague, Va.	(1)	(1)	13.0	Chincoteague, Va.	(1)	(1)	6.1
Apalachicola, Fla.	7.7	5.7	12.4	Anacortes-LaConner, Wash.	(1)	(1)	6.1
Anacortes-LaConner, Wash.	(1)	(1)	11.6	Point Pleasant, N.J.	4.5	5.1	5.9
Cape Charles-Oyster, Va.	18.0	10.8	10.8	Rockland, Maine	(1)	(1)	5.6
Brookings, Oreg.	(1)	(1)	10.7	Cape Charles-Oyster, Va.	7.3	5.2	4.7
Blaine, Wash.	(1)	(1)	10.0	Blaine, Wash.	(1)	(1)	4.2
Illwaco, Wash.	(1)	(1)	8.0	Illwaco, Wash.	(1)	(1)	4.0
Bon Secour-Gulf Shores, Ala.	7.3	8.3	7.3	Brookings, Oreg.	(1)	(1)	3.8

(1) Not available.

Record quantity was 848.2 million lb landed in San Pedro, Calif., in 1950. Record value was $117.1 million in San Pedro in 1976.

Note:--Data for some ports are estimated. To avoid disclosure of private enterprise, the following ports were not included: Port Moller, Alaska; Fernandina Beach, Fla.; Intercoastal City and Morgan City, La.; Chatham, Martha's Vineyard, and Sandwich, Mass.; Port Monmouth-Belford, N.J.; Southport, N.C.; and Reedville, Va.

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1969-78 (1)

Year	Landings for human food		Landings for industrial products (2)		Total	
	Million pounds	Million dollars	Million pounds	Million dollars	Million pounds	Million dollars
1969	2,321	492	2,016	35	4,337	527
1970	2,537	565	2,380	48	4,917	613
1971	2,441	604	2,577	47	5,018	651
1972	2,435	702	2,371	46	4,806	748
1973	2,398	836	2,460	101	4,858	937
1974	2,496	844	2,471	88	4,967	932
1975	2,465	904	2,412	73	4,877	977
1976 (3)	2,760	1,264	2,590	89	5,350	1,353
1977 (3)	2,900	1,404	2,298	111	5,198	1,515
1978 (3)	3,177	1,733	*2,851	121	* 6,028	1,854

(1) Statistics on landings are shown in round weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are shown in weight of meats, excluding the shell.
(2) Processed into meal, oil, fish solubles, and shell products, and used as bait or animal food.
(3) Data are preliminary.

Note:--Data do not include landings by U.S.-flag vessels at Puerto Rico or other ports outside the 50 States. Data do not include products of aquaculture.
*Record. Record landings for human food was 3,307 million lb in 1950.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, 1977 AND 1978

End Use	1977		1978	
	Million pounds	Percent	Million pounds	Percent
Fresh and frozen:				
For human food	1,888	36.3	2,134	35.4
For bait and animal food	137	2.7	103	1.7
Total	2,025	39.0	2,237	37.1
Canned:				
For human food	957	18.4	991	16.4
For bait and animal food	121	2.3	108	1.8
Total	1,078	20.7	1,099	18.2
Cured for human food	55	1.1	52	.9
Reduction to meal, oil, etc.	2,040	39.2	2,640	43.8
Grand total	5,198	100.0	6,028	100.0

Note:--Data are preliminary.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, BY MONTHS, 1978

Month	Landings for human food		Landings for industrial products (1)		Total	
	Million pounds	Percent	Million pounds	Percent	Million pounds	Percent
January	139	4.4	27	0.9	166	2.8
February	167	5.3	8	.3	175	2.9
March	239	7.5	10	.4	249	4.1
April	214	6.7	163	5.7	377	6.3
May	274	8.6	288	10.1	562	9.3
June	302	9.5	594	20.8	896	14.9
July	380	12.0	512	18.0	892	14.8
August	490	15.4	526	18.5	1,016	16.8
September	333	10.5	383	13.4	716	11.9
October	277	8.7	242	8.5	519	8.6
November	197	6.2	43	1.5	240	4.0
December	165	5.2	55	1.9	220	3.6
Total	3,177	100.0	2,851	100.0	6,028	100.0

(1) Processed into meal, oil, solubles, and shell products, and used as bait and animal food.

TAKE OF PRIBILOF ISLANDS SEALSKINS, 1969-78

Year	Skins taken		
	Male	Female	Total
	Number		
1969	38,610	195	38,805
1970	42,060	119	42,179
1971	31,740	84	31,824
1972	37,146	75	37,221
1973	28,582	-	28,582
1974	32,976	51	33,027
1975	28,794	55	28,849
1976	23,173	15	23,188
1977	28,396	48	28,444
1978	24,781	62	24,843

Note:—Through 1972 the harvest shown is for both St. Paul and St. George Islands, but beginning with 1973, commercial harvesting on St. George Island ceased, and data shown are for St. Paul Island only plus seals harvested for subsistence on St. George.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1978 (1)

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Alewives:								
Atlantic and Gulf.	12,696	556	-	-	-	-	12,696	556
Great Lakes. . . .	42,279	702	-	-	-	-	42,279	702
Anchovies.	12,000	5,000	23,380	545	-	-	35,380	5,545
Bluefish	9,010	1,271	2,553	342	-	-	11,563	1,613
Bonito	2,370	640	1,124	212	5,400	1,080	8,894	1,932
Butterfish	801	256	7,280	2,650	-	-	8,081	2,906
Cod:								
Atlantic	10,373	2,452	75,504	18,901	653	163	86,530	21,516
Pacific.	3,014	619	6,625	1,384	1,278	255	10,917	2,258
Croaker.	19,550	2,889	13,411	2,204	-	-	32,961	5,093
Cusk	317	52	2,966	547	102	17	3,385	616
Flounders:								
Atlantic and Gulf:								
Blackback. . . .	6,666	2,400	18,625	8,585	9	5	25,300	10,990
Fluke.	3,489	2,681	15,203	9,109	-	-	18,692	11,790
Yellowtail . . .	4,208	2,488	20,957	12,672	7	5	25,172	15,165
Other.	9,061	4,284	39,603	17,109	82	40	48,746	21,433
Pacific.	9,864	2,255	52,296	11,011	650	118	62,810	13,384
Total.	33,288	14,108	146,684	58,486	748	168	180,720	72,762
Groupers	351	257	5,894	4,114	388	272	6,633	4,643
Haddock.	1,099	363	35,709	11,401	2,680	905	39,488	12,669
Hake:								
Pacific.	6,000	120	1,267	68	-	-	7,267	188
Red.	667	70	4,168	466	6	2	4,841	538
White.	2,917	328	7,904	1,351	88	18	10,909	1,697
Halibut.	8,131	8,407	9,539	10,111	7	9	17,677	18,527
Herring, sea:								
Atlantic	94,242	5,532	17,068	1,192	-	-	111,310	6,724
Pacific.	43,087	10,505	-	-	-	-	43,087	10,505
Jack mackerel. . . .	12,000	660	56,000	3,080	-	-	68,000	3,740
Lingcod.	1,398	309	5,130	1,128	60	13	6,588	1,450
Mackerel:								
Atlantic	2,081	557	1,477	219	-	-	3,558	776
King	1,076	772	4,452	2,733	-	-	5,528	3,505
Pacific.	1,000	55	23,563	1,296	-	-	24,563	1,351
Spanish.	3,823	707	3,474	660	-	-	7,297	1,367

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1978 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Menhaden:								
Atlantic	782,574	20,135	3,892	98	-	-	786,466	20,233
Gulf	1,768,159	76,262	40,388	1,777	-	-	1,808,547	78,039
Total	2,550,733	96,397	44,280	1,875	-	-	2,595,013	98,272
Mullet	31,566	5,546	258	45	-	-	31,824	5,591
Ocean perch:								
Atlantic	267	48	30,579	5,226	4,732	819	35,578	6,093
Pacific	53	10	4,809	895	529	98	5,391	1,003
Pollock:								
Atlantic	3,129	437	35,554	6,065	372	77	39,055	6,579
Alaska	2,880	165	811	45	201	10	3,892	220
Rockfishes	4,518	1,053	52,722	11,252	2,169	455	59,409	12,760
Sablefish	5,646	1,672	23,438	6,639	104	26	29,188	8,337
Salmon, Pacific:								
Chinook or king	21,606	29,204	8,170	10,624	-	-	29,776	39,828
Chum or keta	50,485	30,885	-	-	-	-	50,485	30,885
Pink	194,873	64,496	-	-	-	-	194,873	64,496
Red or sockeye	98,707	82,978	-	-	-	-	98,707	82,978
Silver or coho	21,095	22,804	9,511	13,478	42	68	30,648	36,350
Total	386,766	230,367	17,681	24,102	42	68	404,489	254,537
Scup or porgy	9,650	2,746	11,897	2,902	-	-	21,547	5,648
Sea bass:								
Black	469	326	4,509	1,875	-	-	4,978	2,201
White	240	228	75	71	585	556	900	855
Sea trout:								
Gray	10,655	2,595	10,762	1,791	-	-	21,417	4,386
Spotted	4,203	2,416	58	31	-	-	4,261	2,447
White	368	82	809	132	-	-	1,177	214
Sharks:								
Dogfish	6,596	649	1,366	109	29	3	7,991	761
Other	510	110	1,132	203	100	22	1,742	335
Snapper:								
Red	74	101	5,158	6,035	345	273	5,577	6,409
Other	382	350	2,424	2,354	140	155	2,946	2,859
Striped bass	4,236	4,393	261	271	-	-	4,497	4,664

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1978 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Tuna:								
Albacore	-	-	33,058	20,006	4,255	2,595	37,313	22,601
Bigeye	-	-	480	301	803	329	1,283	630
Bluefin	166	246	5,090	3,149	8,988	3,685	14,244	7,080
Little	79	34	71	36	-	-	150	70
Skipjack	89	63	8,908	6,264	234,417	89,629	243,414	95,956
Yellowfin	197	139	1,792	1,260	265,919	111,078	267,908	112,477
Unclassified	-	-	20	30	1,359	141	1,379	171
Total	531	482	49,419	31,046	515,741	207,457	565,691	238,985
Warsaw	4	2	156	63	-	-	160	65
Whiting	5,786	896	45,288	6,292	-	-	51,074	7,188
Wolffish	237	22	1,188	137	22	3	1,447	162
Other marine finfishes:								
Atlantic and Gulf	133,499	24,109	68,877	23,185	6,395	385	208,771	47,679
Pacific	18,291	5,540	13,451	3,620	185	78	31,927	9,238
Other freshwater fishes	84,115	22,763	-	-	-	-	84,115	22,763
Total fish	3,588,974	460,692	882,134	259,351	543,101	213,387	5,014,209	933,430
Shellfish et al.								
Clams:								
Hard	13,295	29,738	-	-	-	-	13,295	29,738
Ocean quahog	2,686	767	20,279	5,940	-	-	22,965	6,707
Soft	10,091	13,486	-	-	-	-	10,091	13,486
Surf	7,844	2,784	31,393	18,117	-	-	39,237	20,901
Other	2,123	3,299	-	-	-	-	2,123	3,299
Total	36,039	50,074	51,672	24,057	-	-	87,711	74,131
Crabs:								
Blue, hard	138,059	28,139	171	41	-	-	138,230	28,180
Dungeness	29,509	21,385	9,742	7,063	-	-	39,251	28,448
King	26,048	33,613	104,190	134,453	-	-	130,238	168,066
Snow (tanner)	25,901	9,911	103,605	42,645	-	-	129,506	52,556
Other	5,403	4,017	6,514	3,765	-	-	11,917	7,782
Total	224,920	97,065	224,222	187,967	-	-	449,142	285,032

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1978 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Shellfish et al. - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Lobsters:								
American	27,202	49,559	7,217	15,086	-	-	34,419	64,645
Spiny	809	1,726	3,134	6,697	686	1,286	4,629	9,709
Oysters	50,979	60,892	4	5	-	-	50,983	60,897
Scallops:								
Bay	1,371	4,166	-	-	-	-	1,371	4,166
Calico	-	-	948	1,301	-	-	948	1,301
Sea	1,487	3,532	29,489	72,814	-	-	30,976	76,346
Shrimp:								
New England	-	-	7	1	-	-	7	1
South Atlantic	13,675	24,179	6,463	6,699	-	-	20,138	30,878
Gulf (3)	68,744	74,976	176,911	239,640	14,572	19,849	260,227	334,465
Pacific Coast	80,645	15,857	73,758	19,160	-	-	154,403	35,017
Other	6	21	-	-	-	-	6	21
Total	163,070	115,033	257,139	265,500	14,572	19,849	434,781	400,382
Squid:								
Atlantic	1,888	723	1,851	730	-	-	3,739	1,453
Pacific	35,000	3,212	2,401	220	-	-	37,401	3,432
Other	42,944	13,008	3,160	3,479	-	-	46,104	16,487
Total shellfish et al.	585,709	398,990	581,237	577,856	15,258	21,135	1,182,204	997,981
Grand total	4,174,683	859,682	1,463,371	837,207	558,359	234,522	6,196,413	1,931,411

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). (2) Includes all landings in Great Lakes and other inland waters. (3) Includes shrimp landed at Gulf Coast and foreign ports.

Note:--Data are preliminary; they include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States; therefore, they will not agree with "U.S. Commercial Landings" table. Data do not include production of aquaculture.

U.S. FISHERY CONSERVATION ZONE

FOREIGN CATCH

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY COUNTRY AND AREA, 1977
(Preliminary)

Country and area	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Bering Sea and Aleutian Islands	Total Alaska	Hawaii and Pacific Islands	Grand total
	Metric tons, round weight						
North America:							
Canada	27,928.0	415.8	2,178.3	100.0	2,278.3	-	30,622.1
Cuba	1,581.0	-	-	-	-	-	1,581.0
Europe:							
Bulgaria	5,015.0	-	-	-	-	-	5,015.0
EEC, Italy	5,404.0	-	-	-	-	-	5,404.0
German Democratic Republic	8,065.0	-	-	-	-	-	8,065.0
Poland	20,095.0	18,352.0	1,465.0	-	1,465.0	-	39,912.0
Romania	1,152.0	-	-	-	-	-	1,152.0
Spain	14,589.0	-	-	-	-	-	14,589.0
USSR	102,190.0	103,449.0	65,185.0	112,041.0	177,226.0	22.0	382,887.0
Asia:							
Japan	14,977.0	-	100,836.0	1,012,499.0	1,113,335.0	-	1,128,312.0
China, Taiwan	-	-	-	1,502.0	1,502.0	-	1,502.0
Republic of Korea	-	-	38,314.0	41,843.0	80,157.0	-	80,157.0
Grand total	200,996.0	122,216.8	207,978.3	1,167,985.0	1,375,963.3	22.0	1,699,198.1

(1) Cape Hatteras northward.

Note:--Excludes tunas.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY COUNTRY AND AREA, 1978
(Preliminary)

Country and area	North Atlantic (1)	California, Oregon, and Washington	Gulf of Alaska	Bering Sea and Aleutian Islands	Total Alaska	Hawaii and Pacific Islands	Grand total
	Metric tons, round weight						
North America:							
Canada	38,687.0	0.5	2,533.3	88.7	2,622.0	-	41,309.5
Mexico	3,954.0	-	-	-	-	-	3,954.0
Europe:							
Bulgaria	11.2	-	-	-	-	-	11.2
EEC, Italy	5,273.0	-	-	-	-	-	5,273.0
Poland	-	27,254.0	1,266.0	-	1,266.0	-	28,520.0
Romania	175.0	-	-	-	-	-	175.0
Spain	13,699.9	-	-	-	-	-	13,699.9
USSR	17,952.2	71,484.0	62,636.3	220,985.1	283,621.4	-	373,057.6
Asia:							
China, Taiwan	-	-	-	3,227.1	3,227.1	-	3,227.1
Japan	7,134.9	-	66,271.9	1,110,597.5	1,176,869.4	-	1,184,004.3
Republic of Korea	-	-	34,920.9	65,775.3	100,696.2	-	100,696.2
Grand total	86,887.2	98,738.5	167,628.4	1,400,673.7	1,568,302.1	-	1,753,927.8

(1) Cape Hatteras northward.

Note:--Excludes tunas. Beginning June 4, 1978, Canadian authorities excluded almost all U.S. fishing vessels from Canadian waters, and U.S. authorities excluded almost all Canadian fishing vessels from U.S. waters. Halibut fishing of both countries in the Pacific Ocean continued under the U.S.-Canada Halibut Convention. Fishing also continued by vessels of both nations in boundary regions in the Atlantic and Pacific often referred to as "disputed zones."

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY SPECIES AND AREA, 1977
(Preliminary)

Item	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Bering Sea and Aleutian Islands	Total Alaska	Hawaii and Pacific Islands	Total
	Metric tons, round weight						
Finfish							
Armorhead	-	-	-	-	-	22.0	22.0
Atka mackerel	-	-	19,429.0	-	19,429.0	-	19,429.0
Butterfish	2,778.0	-	-	-	-	-	2,778.0
Cod:							
Atlantic	6,279.0	-	-	-	-	-	6,279.0
Pacific	-	-	2,455.0	36,466.0	38,921.0	-	38,921.0
Flounders:							
Yellowtail	38.0	-	-	-	-	-	38.0
Atlantic, other	109.0	-	-	-	-	-	109.0
Yellowfin sole	-	-	-	58,986.0	58,986.0	-	58,986.0
Pacific, other	-	12.0	18,589.8	62,951.0	81,540.8	-	81,552.8
Haddock	2,935.0	-	-	-	-	-	2,935.0
Hake:							
Atlantic:							
Red	5,231.0	-	-	-	-	-	5,231.0
Silver (whiting)	55,030.0	-	-	-	-	-	55,030.0
Pacific	-	117,592.0	-	-	-	-	117,592.0
Halibut	-	.7	2,171.8	100.0	2,271.8	-	2,272.5
Herring, sea:							
Atlantic	2,149.0	-	-	-	-	-	2,149.0
Pacific	-	-	-	18,736.0	18,736.0	-	18,736.0
Jack mackerel	-	2,797.0	-	-	-	-	2,797.0
Mackerel, Atlantic	52,598.0	-	-	-	-	-	52,598.0
Ocean perch:							
Atlantic (redfish)	204.0	-	-	-	-	-	204.0
Pacific	-	-	-	7,250.0	7,250.0	-	7,250.0
Rockfishes, Pacific, other	-	818.2	23,997.8	876.0	24,873.8	-	25,692.0
Pollocks:							
Alaska	-	-	121,274.0	888,552.0	1,009,826.0	-	1,009,826.0
Atlantic	3,414.0	-	-	-	-	-	3,414.0
Sablefish	-	269.0	15,489.8	4,634.0	20,123.8	-	20,392.8
Salmon, Pacific	-	399.1	.6	-	.6		399.7
Other finfish	17,249.0	328.8	4,570.5	68,243.0	72,813.5	-	90,391.3
Total fish	148,014.0	122,216.8	207,978.3	1,146,794.0	1,354,772.3	22.0	1,625,025.1
Shellfish et al.							
Crabs, snow (tanner)	-	-	-	12,471.0	12,471.0	-	12,471.0
Lobster, American	242.0	-	-	-	-	-	242.0
Scallops, sea (meats)	13,044.0	-	-	-	-	-	13,044.0
Snails (meats)	-	-	-	404.0	404.0	-	404.0
Squid:							
Atlantic:							
Short-finned	23,481.0	-	-	-	-	-	23,481.0
Long-finned	16,215.0	-	-	-	-	-	16,215.0
Pacific	-	-	-	8,316.0	8,316.0	-	8,316.0
Total shellfish	52,982.0	-	-	21,191.0	21,191.0	-	74,173.0
Grand total	200,996.0	122,216.8	207,978.3	1,167,985.0	1,375,963.3	22.0	1,699,198.1

(1) Cape Hatteras northward. Note:--Excludes tunas.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. FISHERY CONSERVATION ZONE (FCZ), BY SPECIES AND AREA, 1978
(Preliminary)

Item	North Atlantic (1)	Washington, Oregon, and California	Gulf of Alaska	Bering Sea and Aleutian Islands	Total Alaska	Hawaii and Pacific Islands	Total
	Metric tons, round weight						
Finfish							
Atka mackerel	-	-	19,585.2	24,225.2	43,810.4	-	43,810.4
Butterfish	1,324.2	-	-	-	-	-	1,324.2
Cod:							
Atlantic	9,503.0	-	-	-	-	-	9,503.0
Pacific	-	-	11,368.5	46,786.9	58,155.4	-	58,155.4
Flounders:							
Yellowtail	58.0	-	-	-	-	-	58.0
Atlantic, other	292.0	-	-	-	-	-	292.0
Yellowfin sole	-	-	-	110,312.1	110,312.1	-	110,312.1
Pacific, other	-	4.0	14,313.9	125,497.8	139,811.7	-	139,815.7
Haddock	10,657.0	-	-	-	-	-	10,657.0
Hake:							
Atlantic:							
Red	2,136.0	-	-	-	-	-	2,136.0
Silver (whiting)	14,353.8	-	-	-	-	-	14,353.8
Pacific	-	96,827.0	-	-	-	-	96,827.0
Halibut	-	-	2,533.3	88.7	2,622.0	-	2,622.0
Herring, river (alewives)	29.9	-	-	-	-	-	29.9
Herring, sea, Pacific	-	-	-	8,433.6	8,433.6	-	8,433.6
Jack mackerel	-	887.0	-	-	-	-	887.0
Mackerel, Atlantic	329.6	-	-	-	-	-	329.6
Ocean perch:							
Atlantic (redfish)	92.0	-	-	-	-	-	92.0
Pacific	-	-	8,169.3	7,508.0	15,677.3	-	15,677.3
Rockfishes, Pacific, other	-	757.5	1,895.9	-	1,895.9	-	2,653.4
Pollocks:							
Alaska	-	-	96,327.3	977,749.3	1,074,076.6	-	1,074,076.6
Atlantic	4,756.0	-	-	-	-	-	4,756.0
Sablefish	-	100.0	7,127.1	1,959.9	9,087.0	-	9,187.0
Other finfish	4,297.7	163.0	5,986.8	71,559.3	77,546.1	-	82,006.8
Total fish	47,829.2	98,738.5	167,307.3	1,374,120.8	1,541,428.1	-	1,687,995.8
Shellfish et al.							
Crabs, snow (tanner)	-	-	-	14,961.9	14,961.9	-	14,961.9
Lobster, American	269.0	-	-	-	-	-	269.0
Scallops, sea (meats)	12,123.0	-	-	-	-	-	12,123.0
Snails (meats)	-	-	-	2,184.4	2,184.4	-	2,184.4
Squid:							
Atlantic:							
Short-finned	17,310.4	-	-	-	-	-	17,310.4
Long-finned	9,355.6	-	-	-	-	-	9,355.6
Unclassified	-	-	321.1	-	321.1	-	321.1
Pacific	-	-	-	9,406.6	9,406.6		9,406.6
Total shellfish	39,058.0	-	321.1	26,552.9	26,874.0	-	65,932.0
Grand total	86,887.2	98,738.5	167,628.4	1,400,673.7	1,568,302.1	-	1,753,927.8

(1) Cape Hatteras northward. Note:--Excludes tunas.

U.S. FISHERY CONSERVATION ZONE

FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1977 and 1978
(Preliminary)

Country and Species	1977	1978
	- - - Metric tons, round weight - - -	
Bulgaria:		
Hake:		
Red	25.0	-
Silver (whiting)	1,419.0	0.2
Mackerel, Atlantic	3,110.0	11.0
Other finfish	401.0	-
Squid:		
Short-finned	52.0	-
Long-finned	8.0	-
Total	5,015.0	11.2
Canada (1):		
Cod, Atlantic	6,279.0	9,503.0
Flounders (including yellowtail)	38.0	58.0
Flounders, other	109.0	292.0
Haddock	2,935.0	10,657.0
Herring, Atlantic	384.0	-
Mackerel, Atlantic	510.0	-
Ocean perch, Pacific	204.0	92.0
Pollock, Atlantic	3,414.0	4,756.0
Other finfish	746.0	937.0
Lobster, American	242.0	269.0
Scallops, sea (meats)	13,044.0	12,123.0
Squid:		
Short-finned	5.0	-
Long-finned	18.0	-
Total	27,928.0	38,687.0
Cuba:		
Butterfish	110.0	-
Hake:		
Red	38.0	-
Silver (whiting)	269.0	-
Herring, sea	153.0	-
Mackerel, Atlantic	737.0	-
Other finfish	240.0	-
Squid:		
Short-finned	6.0	-
Long-finned	28.0	-
Total	1,581.0	-
European Economic Community, Italy:		
Butterfish	107.0	354.0
Hake:		
Red	5.0	50.0
Silver (whiting)	47.0	612.0
Mackerel, Atlantic	395.0	65.0
Other finfish	659.0	695.0
Squid:		
Short-finned	1,948.0	2,131.0
Long-finned	2,243.0	1,366.0
Total	5,404.0	5,273.0
German Democratic Republic:		
Mackerel, Atlantic	7,981.0	-
Other finfish	75.0	-
Squid, long-finned	9.0	-
Total	8,065.0	-

(Continued)

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1977 and 1978 - Continued
(Preliminary)

Country and species	1977	1978
	- - Metric tons, round weight - -	
Japan:		
Butterfish	1,741.0	651.2
Hake:		
Red	-	8.7
Silver (whiting)	38.0	274.5
Herring:		
River	-	1.6
Sea	1.0	-
Mackerel, Atlantic	17.0	8.6
Other finfish	470.0	137.1
Squid:		
Short-finned	4,876.0	3,744.0
Long-finned	7,834.0	2,309.2
Total	14,977.0	7,134.9
Mexico:		
Butterfish	-	93.0
Hake:		
Red	-	1.0
Silver (whiting)	-	4.0
Mackerel, Atlantic	-	1.0
Finfish, other	-	33.0
Squid:		
Short-finned	-	2,769.0
Long-finned	-	1,053.0
Total	-	3,954.0
Poland:		
Butterfish	280.0	-
Hake, silver (whiting)	-	-
Herring, sea	119.0	-
Mackerel, Atlantic	17,167.0	-
Other finfish	1,641.0	-
Squid:		
Short-finned	656.0	-
Long-finned	232.0	-
Total	20,095.0	-
Romania:		
Butterfish	16.0	56.0
Hake, silver (whiting)	12.0	20.0
Mackerel, Atlantic	8.0	10.0
Other finfish	9.0	22.0
Squid:		
Short-finned	1,107.0	50.0
Long-finned	-	17.0
Total	1,152.0	175.0
Spain:		
Butterfish	105.0	156.0
Hake:		
Red	-	3.0
Silver (whiting)	100.0	53.0
Herring, river	-	8.0
Mackerel, Atlantic	82.0	28.0
Other finfish	531.0	265.5
Squid:		
Short-finned	7,935.0	8,583.0
Long-finned	5,836.0	4,603.4
Total	14,589.0	13,699.9
USSR:		
Butterfish	419.0	14.0
Hake:		
Red	5,155.0	2,073.3
Silver (whiting)	53,145.0	13,390.1
Herring, sea	1,492.0	-
Herring, river	-	20.3
Mackerel, Atlantic	22,590.0	206.0
Other finfish	11,379.0	2,208.1
Squid:		
Short-finned	8,003.0	33.4
Long-finned	7.0	7.0
Total	102,190.0	17,952.2
Grand total	200,996.0	86,887.2

(1) See note on page 13. Note:--Excludes tunas.

U.S. FISHERY CONSERVATION ZONE
FOREIGN CATCH

WASHINGTON, OREGON, CALIFORNIA, AND WESTERN PACIFIC:
FOREIGN CATCH, BY COUNTRY AND SPECIES, 1977 and 1978
(Preliminary)

Country and species	1977	1978
	- - Metric tons, round weight - -	
Canada:		
Halibut	0.7	-
Lingcod	7.3	-
Rockfishes	8.2	0.5
Salmon	399.1	-
Other finfish	.5	-
Total	415.8	.5
Poland:		
Flounders	1.0	2.0
Hake, Pacific	17,654.0	26,721.0
Jack mackerel	365.0	214.0
Rockfishes	290.0	205.0
Sablefish	7.0	43.0
Other finfish	35.0	69.0
Total	18,352.0	27,254.0
USSR:		
Flounders	11.0	2.0
Hake, Pacific	99,938.0	70,106.0
Jack mackerel	2,432.0	673.0
Rockfishes	520.0	552.0
Sablefish	262.0	57.0
Seamount groundfish	22.0	-
Other finfish	286.0	94.0
Total	103,471.0	71,484.0
Grand total	122,238.8	98,738.5

Note:--Excludes tunas.

FOREIGN CATCH

GULF OF ALASKA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1977 and 1978
(Preliminary)

Country and species	1977	1978
	- - Metric tons, round weight - -	
Canada:		
Flounders (1)	0.9	-
Halibut	2,171.8	2,533.3
Lingcod	.5	-
Rockfishes	1.8	-
Sablefish	1.8	-
Salmon	.6	-
Turbot	.9	-
Total	2,178.3	2,533.3
Japan:		
Atka mackerel	-	1,135.7
Cod, Pacific	1,445.0	8,845.8
Flounders (1)	18,124.0	13,809.4
Ocean perch, Pacific	-	4,547.6
Pollock, Alaska	42,415.0	26,093.0
Rockfishes	21,566.0	1,277.2
Sablefish	13,886.0	6,458.3
Other finfish	3,400.0	3,919.1
Squid, unclassified	-	185.8
Total	100,836.0	66,271.9
Poland:		
Atka mackerel	209.0	-
Cod, Pacific	-	13.6
Flounders (1)	-	12.6
Ocean perch, Pacific	-	3.5
Pollock, Alaska	1,256.0	1,226.5
Rockfishes	-	8.8
Squid, unclassified	-	1.0
Total	1,465.0	1,266.0
Republic of Korea:		
Atka mackerel	-	63.0
Cod, Pacific	-	1,369.0
Flounders (1)	-	295.5
Ocean perch, Pacific	-	3,048.7
Pollock, Alaska	36,015.0	27,051.9
Rockfishes	601.0	608.7
Sablefish	1,598.0	664.8
Other finfish	100.0	1,686.6
Squid, unclassified	-	132.7
Total	38,314.0	34,920.9
USSR:		
Atka mackerel	19,220.0	18,386.5
Cod, Pacific	1,010.0	1,140.1
Flounders (1)	464.0	196.4
Ocean perch, Pacific	-	569.5
Pollock, Alaska	41,588.0	41,955.9
Rockfishes	1,829.0	1.2
Sablefish	4.0	4.0
Other finfish	1,070.0	381.1
Squid, unclassified	-	1.6
Total	65,185.0	62,636.3
All foreign countries	207,978.3	167,628.4

(1) May include yellowfin sole. Note:--Excludes tunas.

U.S. FISHERY CONSERVATION ZONE
FOREIGN CATCH

BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH,
BY COUNTRY AND BY SPECIES, 1977 and 1978
(Preliminary)

Country and species	1977	1978
	- - - Metric tons, round weight - - -	
Canada:		
Halibut	100.0	88.7
China, Taiwan:		
Atka mackerel	-	0.3
Cod, Pacific	-	70.4
Flounders, yellowfin sole	-	1.4
Flounders, other	-	68.3
Ocean perch, Pacific	-	6.6
Pollock, Alaska	1,346.0	3,039.9
Sablefish	53.0	5.2
Other finfish	103.0	-
Squid, unclassified	-	35.0
Total	1,502.0	3,227.1
Japan:		
Atka mackerel	-	1,531.0
Cod, Pacific	36,188.0	45,015.0
Flounders:		
Yellowfin sole	58,702.0	59,737.3
Other	56,740.0	87,785.9
Herring, sea	5,592.0	2,315.3
Ocean perch, Pacific	7,250.0	6,776.0
Pollock, Alaska	782,419.0	821,306.5
Sablefish	4,491.0	1,805.2
Other finfish	39,926.0	58,040.7
Crabs, snow (tanner)	12,471.0	14,961.9
Snails (meats)	404.0	2,184.4
Squid, unclassified	8,316.0	9,138.3
Total	1,012,499.0	1,110,597.5
Republic of Korea:		
Atka mackerel	-	71.9
Cod, Pacific	-	1,141.1
Flounders:		
Yellowfin sole	-	41.2
Other	-	264.7
Herring, sea	-	11.9
Ocean perch, Pacific	-	483.1
Pollock, Alaska	39,785.0	60,689.1
Sablefish	90.0	149.3
Other finfish	1,968.0	2,712.5
Squid, unclassified	-	210.5
Total	41,843.0	65,775.3
USSR:		
Atka mackerel	-	22,622.0
Cod, Pacific	278.0	560.4
Flounders:		
Yellowfin sole	284.0	50,532.2
Other	6,211.0	37,378.9
Herring, sea	13,144.0	6,106.4
Ocean perch, Pacific	876.0	242.3
Pollock, Alaska	65,002.0	92,713.8
Sablefish	-	.2
Other finfish	26,246.0	10,806.1
Squid, unclassified	-	22.8
Total	112,041.0	220,985.1
Grand total	1,167,985.0	1,400,673.7

Note:--Excludes tunas.

The Fishery Conservation and Management Act of 1976 (FCMA) requires NMFS to collect catch statistics and to obtain relevant economic, social, and ecological information on marine recreational fisheries. Most species of finfish, such as cod, mackerels, salmon, seatrouts, and striped bass, are now harvested by both recreational and commercial fishermen in inshore, estuarine, and open-ocean areas. Recent data indicate that recreational fishermen now catch nearly one-half of the total edible finfish harvest. The FCMA authorizes the preparation of Fishery Management Plans (FMPs) to regulate the harvest of marine species of finfish and shellfish. FMPs have been developed for several species including Atlantic cod and Pacific salmon. Many other species of recreational interest, including black sea bass, king and Spanish mackerel, scup, snappers, and groupers, will be included under FMPs in the next few years. Information on the quantities taken, effort expended, and seasonal and geographical distribution of the recreational catch of these species is required to develop these management plans. Accurate annual catch statistics, coupled with other studies, will facilitate management planning for optimum yield of fishery resources.

In 1960, 1965, and 1970, NMFS conducted salt-water angling surveys through the Bureau of the Census as supplements to the national surveys of fishing and hunting. Page 22 summarizes data on participation and expenditures for marine recreational fishing and the catch of finfish from these surveys; pages 23 and 24 show the recreational catches of finfish by species for 1970. However, the catch data from the salt-water angling surveys are less than adequate, because precise information on the area of capture necessary for effective stock assessment programs was not provided, recreational catches of shellfish were not included, and the 1-year recall period introduced memory bias errors. In addition, for effective management of fisheries, data collected every 5 years are inadequate.

In 1974, a regional survey was conducted in the Northeastern Coastal United States. In 1975, a second regional survey included the South Atlantic and Gulf States. The data collection approach involved a multistage sampling plan. The target population of recreational fishing households was considered as a subset of the households with telephones. A stratified (by population and distance from shore) random sample of households was telephoned to identify households containing marine recreational fishermen and to obtain data on participation. A sample of the identified recreational fishing households was mailed a detailed questionnaire each 2 months, and a telephone followup of nonrespondents was conducted. Pages 25 - 27 show the result of these regional surveys, including participation and expenditures by State of residence and catches of finfish and shellfish. These regional surveys were not entirely satisfactory; several areas of weakness in the procedure were evident, indicating the need for an improved methodological approach.

A methodology study began in August 1976, under contract with a private firm. A literature search was conducted, questionnaires were developed and tested in the field, then a telephone-screening process was carried out to identify a sampling frame. Several data collection approaches were compared on the Pacific Coast, and one was chosen as most cost-effective. This approach was also tested on the Atlantic and Gulf Coasts. The methodology studies were completed in December 1977. An optimal survey approach was recommended which includes a combined telephone and onsite intercept survey--a random-digit telephone survey to obtain participation and effort data, and an intercept (creel) survey to obtain the distribution of the total catch at the species level.

On November 1, 1978, NMFS began a new Marine Recreational Fisheries Survey using the aforementioned methodology. The survey, conducted under contract, will continue for a 1-year period. Human Sciences Research, Inc., of McLean, Virginia, was awarded a contract for data collection for the Atlantic Coast, the Gulf Coast, Alaska, Hawaii, Guam, and American Samoa. Clapp and Mayne, Inc., of San Juan, Puerto Rico, was awarded a contract for data collection for Puerto Rico and the U.S. Virgin Islands. A contract for processing the data and preparation of a final report for all areas was awarded to Human Sciences Research, Inc.

Results from the survey will be available in February 1980. The Pacific Coast States of California, Oregon, and Washington are not included in the survey. However, a 1-year survey on the Pacific Coast is scheduled to begin in July 1979. These surveys are the first in a series of planned annual surveys of marine recreational fisheries.

Several publications on marine recreational fishery statistics are available as indicated in the Publications Section.

U.S. MARINE RECREATIONAL FISHERIES: ESTIMATES OF THE NUMBER OF MARINE FISHERMEN, EXPENDITURES, AND TOTAL FINFISH CATCH BY COAST, 1955, 1960, 1965, AND 1970

Year	Fishermen(1)			
	Atlantic	Gulf of Mexico	Pacific	Total
	Thousand			
1955	2,343	1,077	1,137	4,557
1960	3,383	1,437	1,472	6,292
1965	4,178	2,084	2,043	8,305
1970	5,010	2,272	2,178	9,460

Year	Expenditures			
	Atlantic	Gulf of Mexico	Pacific	Total
	Thousand dollars			
1955	213,653	98,209	177,077	488,939
1960	346,373	144,857	134,961	626,191
1965	331,179	176,104	292,373	799,656
1970	636,380	404,646	183,679	1,224,705

Year	Total finfish catch(2)			
	Atlantic	Gulf of Mexico	Pacific(3)	Total
	Thousand pounds			
1955	(4)	(4)	(4)	(4)
1960	731,852	411,110	237,339	1,380,301
1965	836,481	375,575	262,297	1,474,353
1970	917,631	485,728	173,464	1,576,823

(1) Includes persons 12 years old or older who fished at least parts of 3 days or spent $7.50 or more on fishing during the year. Does not include persons who fished only for shellfish.
(2) Weight of fish caught, but not necessarily brought ashore, by recreational marine fishermen. These weight estimates contain errors in both sampling and response. Does not include shellfish (crustaceans, mollusks, and other invertebrates). In some coastal areas, recreational marine fishermen harvest significant quantities of shellfish.
(3) Does not include Hawaii.
(4) No survey in 1955.

Note:--See Glossary for definition of marine recreational expenditures and marine recreational fishing.

Sources:--Clark, John R., The 1960 Salt-Water Angling Survey. U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife, Circular 153, 1962, 36 pp.
Deuel, David G., and Clark, John R., The 1965 Salt-Water Angling Survey. U.S. Department of the Interior, Bureau of Sport Fisheries and Wildlife, Resource Publication 67, 1968, 51 pp.
Deuel, David G., The 1970 Salt-Water Angling Survey. U.S. Department of Commerce, National Marine Fisheries Service, Current Fishery Statistics No. 6200, 1973, 54 pp.
U.S. Department of the Interior, 1955 National Survey of Fishing and Hunting. Bureau of Sport Fisheries and Wildlife, Circular 44, 1956, 50 pp.
U.S. Department of the Interior, 1960 National Survey of Fishing and Hunting. Bureau of Sport Fisheries and Wildlife, Circular 120, 100 pp.
U.S. Department of the Interior, 1965 National Survey of Fishing and Hunting. Bureau of Sport Fisheries and Wildlife, Resource Publication 27, 76 pp.
U.S. Department of the Interior, 1970 National Survey of Fishing and Hunting. Bureau of Sport Fisheries and Wildlife, Resource Publication 95, 1972, 106 pp.

U.S. MARINE RECREATIONAL CATCH OF FINFISH: ESTIMATED WEIGHT(1) BY SPECIES AND BY REGION, 1970

Species	Region(2)							All regions
	North Atlantic	Middle Atlantic	South Atlantic	East Gulf of Mexico	West Gulf of Mexico	South Pacific	North Pacific	
	Thousand pounds							
Barracudas	-	-	3,746	112	-	5,524	-	9,382
Basses, black sea	615	6,710	12,381	1,762	24	-	-	21,492
Basses, Pacific	-	-	-	-	-	18,917	-	18,917
Billfishes	-	717	12,489	551	-	1,361	-	15,118
Bluefish	50,161	49,720	19,271	351	1,308	-	-	120,811
Bonitos	-	282	2,295	2,955	37	15,659	-	21,228
California corbina	-	-	-	-	-	7,450	-	7,450
Catfishes	-	6,151	16,570	31,989	17,800	-	-	72,510
Cods	35,688	230	-	-	-	-	990	36,908
Croakers	-	3,831	5,947	48,051	14,743	2,254	610	75,436
Dolphins	-	419	27,806	2,133	-	-	-	30,358
Drum, black	-	1,454	12,123	16,096	13,004	-	-	42,677
Drum, red	-	83	13,358	27,525	25,520	-	-	66,486
Eel, American	3,166	740	122	76	19	-	-	4,123
Flatfishes, Pacific	-	-	-	-	-	1,113	3,058	4,171
Flounders, summer	11,611	7,742	8,938	8,042	2,985	-	-	39,318
Flounder, winter (blackback)	24,684	12,881	-	-	-	-	-	37,565
Groupers	-	-	24,121	15,934	922	-	-	40,977
Grunts	-	-	25,962	7,114	4,316	-	-	37,392
Haddock	2,528	-	-	-	-	-	-	2,528
Hake, red	-	904	-	-	-	-	-	904
Hake, silver (whiting)	659	1,436	-	-	-	-	-	2,095
Halibut, California	-	-	-	-	-	9,243	173	9,416
Halibut, Pacific	-	-	-	-	-	-	2,815	2,815
Jacks	-	-	33,149	3,369	1,223	-	-	37,741
Jack mackerel	-	-	-	-	-	887	337	1,224
Kingfishes	3,457	2,402	14,533	12,678	3,107	-	-	36,177
Mackerels, Atlantic	41,482	29,250	-	-	-	-	-	70,732
Mackerel, king	-	225	34,942	24,481	2,978	-	-	62,626
Mackerel, Pacific	-	-	-	-	-	530	-	530
Mackerels, Spanish	-	946	14,623	7,200	608	-	-	23,377
Mullets	-	-	341	1,845	95	-	-	2,281
Perches	32	12,592	226	809	584	-	-	14,243
Pollock	5,584	-	-	-	-	-	-	5,584
Porgies	2,296	2,127	24,059	21,320	5,675	-	-	55,477
Puffers	7,899	16,568	4,440	99	8	-	-	29,014
Rockfishes	-	-	-	-	-	6,519	7,238	13,757
Salmon, chinook	-	-	-	-	-	-	15,171	15,171
Salmon, coho	-	-	-	-	-	-	14,356	14,356
Salmon, pink	-	-	-	-	-	-	1,188	1,188

See footnotes at end of table.

(Continued on next page)

U.S. MARINE RECREATIONAL CATCH OF FINFISH: ESTIMATED WEIGHT(1) BY SPECIES AND BY REGION, 1970 - Continued

Species	Region(2)							All regions
	North Atlantic	Middle Atlantic	South Atlantic	East Gulf of Mexico	West Gulf of Mexico	South Pacific	North Pacific	
	Thousand pounds							
Sea bass, white	-	-	-	-	-	1,009	7	1,016
Sea robins	2,343	6,741	4	10	1	-	-	9,099
Sea trout, gray (weakfish)	1,645	14,039	-	-	-	-	-	15,684
Sea trout, sand (white)	-	-	23	21,124	9,345	-	-	30,492
Sea trout, spotted	-	-	25,040	40,869	40,487	-	-	106,396
Sharks	5,263	1,680	883	14,452	1,221	1,205	662	25,366
Snapper, red	-	-	5,682	11,360	278	-	-	17,320
Snapper, yellowtail	-	-	20,163	814	-	-	-	20,977
Snappers, other	-	-	735	90	2,554	-	-	3,379
Snook	-	-	17,957	3,487	-	-	-	21,444
Spot	-	21,573	9,840	-	-	-	-	31,413
Steelhead trout	-	-	-	-	-	-	4,441	4,441
Striped bass	45,844	27,262	189	-	-	-	10,488	83,783
Surfperches	-	-	-	-	-	5,092	2,738	7,830
Tautog	15,629	1,619	-	-	-	-	-	17,248
Tunas	3,711	886	5,943	827	-	7,346	660	19,373
Wahoo	-	3,985	1,571	-	-	-	-	5,556
Yellowtail, California	-	-	-	-	-	5,629	-	5,629
Other fish	3,154	11,072	4,441	6,595	2,766	4,496	14,298	46,822
Total	267,451	246,267	403,913	334,120	151,608	94,234	79,230	1,576,823

(1) Weight of fish caught, but not necessarily brought ashore, by recreational marine fishermen. These weight estimates contain errors due to both sampling and nonsampling sources. Data do not include crustaceans, mollusks, and other invertebrates. In some coastal areas, recreational marine fishermen harvest significant quantities of these animals.

(2) The regions are defined as follows:

North Atlantic	Atlantic coast from Maine to and including New York
Middle Atlantic	Atlantic coast from New Jersey to Cape Hatteras, N.C.
South Atlantic	Atlantic coast from Cape Hatteras, N.C., to southern Florida including the Florida Keys
East Gulf of Mexico	Gulf coast from the Florida Keys to and including the Mississippi River delta
West Gulf of Mexico	Gulf coast from the Mississippi River delta to the Mexican border
South Pacific	Pacific coast from the Mexican border to Point Conception, Calif.
North Pacific	Pacific coast from Point Conception, Calif., north to Washington and including Alaska

Note:--Excludes catch by persons less than 12 years old, and excludes catch by persons fishing during parts of less than 3 days in 1970. Also excludes those who spent less than $7.50 on fishing in 1970.

Source:--Deuel, David G., 1970 Salt-Water Angling Survey. U.S. Department of Commerce, National Marine Fisheries Service, Current Fishery Statistics No. 6200, 1973, 54 pp.

NORTHEASTERN U.S. (MAINE THROUGH VIRGINIA) MARINE RECREATIONAL FISHERY: ESTIMATED NUMBER OF PARTICIPANTS AND EXPENDITURES, BY STATE OF RESIDENCE: MID-JUNE 1973 TO MID-JUNE 1974

State of residence	Fishing households (1)	Participants (1)	Expenditures
	-Thousands-		Thousand dollars
Maine	79	187	4,844
New Hampshire	55	116	3,471
Vermont	15	33	780
Massachusetts	520	1,187	34,307
Rhode Island	115	265	7,232
Connecticut	305	655	18,584
New York	1,153	2,532	91,211
New Jersey	701	1,473	99,022
Delaware	62	138	6,689
Pennsylvania	498	1,053	39,811
West Virginia	72	152	2,680
District of Columbia	46	93	5,061
Maryland	389	852	47,043
Virginia	388	839	17,380
Total	4,398	9,575	378,115

(1) Because of differences in methodology, the figures appearing in this table are slightly different from and supersede those shown in the Fisheries of the United States, 1976, Current Fishery Statistics No. 7200, and Participation in Marine Recreational Fishing, Northeastern United States, 1973-74, by John E. Ridgely, and David G. Deuel, Current Fishery Statistics No. 6236, U.S. Department of Commerce, National Marine Fisheries Service.

Note:--Includes persons of all ages who fished for fish or shellfish at least once during the 12-month period. Totals shown for participants are exclusive of duplication.

Source:--Unpublished data from the Northeastern Regional Survey of Recreational Fishing in Salt Water, 1973-1974, U.S. Department of Commerce, National Marine Fisheries Service.

SOUTHEASTERN U.S. (NORTH CAROLINA THROUGH TEXAS) MARINE RECREATIONAL FISHERY: ESTIMATED NUMBER OF PARTICIPANTS AND EXPENDITURES, BY STATE OF RESIDENCE, FEBRUARY 1974 THROUGH MARCH 1975

State of residence	Fishing households	Participants	Expenditures (1)
	-Thousands-		Thousand dollars
North Carolina	533	1,206	57,588
South Carolina	228	504	14,817
Georgia	303	683	21,821
Florida	1,074	2,379	114,848
Alabama	216	506	20,877
Mississippi	135	337	12,321
Louisiana	319	851	40,151
Texas	797	2,057	65,666
Total	3,605	8,523	348,089

(1) Unpublished data from the Southeastern Regional Survey of Recreational Fishing in Salt Water, 1974-1975, U.S. Department of Commerce, National Marine Fisheries Service.

Note:--Includes persons of all ages who fished for finfish or shellfish at least once during the 12-month period. Totals shown for participants are exclusive of duplication.

Source:--Mabrey, Ernest L., David G. Deuel, and Arthur Kirsch, Participation in Marine Recreational Fishing, Southeastern United States, 1974, U.S. Department of Commerce, National Marine Fisheries Service, Current Fishery Statistics No. 7333, 1977, 13 pp., except as noted.

NORTHEASTERN U.S. (MAINE THROUGH VIRGINIA) MARINE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY STATE OF LANDING, 1974

State	Finfish (1)	Shellfish (2)
	Thousand pounds	
Maine	6,942	3,744
New Hampshire	1,423	1,474
Massachusetts	30,992	23,732
Rhode Island	18,725	5,726
Connecticut	31,191	2,379
New York	101,256	23,061
New Jersey	92,777	12,344
Delaware	6,378	4,001
Maryland	49,835	8,392
Virginia	17,609	4,285
Total	357,128	89,138

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. (2) Shellfish are in terms of live weight including shells.

Source:--Unpublished data from the Northeastern Regional Survey of Recreational Fishing in Salt Water, 1973-1974, U.S. Department of Commerce, National Marine Fisheries Service.

SOUTHEASTERN U.S. (NORTH CAROLINA THROUGH TEXAS) MARINE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY STATE OF LANDING, 1975

State	Finfish (1)	Shellfish (2)
	Thousand pounds	
North Carolina	26,753	7,641
South Carolina	17,793	6,441
Georgia	9,601	1,165
Florida East Coast	66,457	32,047
Florida West Coast	97,778	26,557
Alabama	10,756	1,039
Mississippi	9,883	1,447
Louisiana	61,541	17,409
Texas	51,936	9,725
Total	352,498	103,471

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. (2) Shellfish are in terms of live weight including shells.

Source:--Unpublished data from the Southeastern Regional Survey of Recreational Fishing in Salt Water, 1974-1975. U.S. Department of Commerce, National Marine Fisheries Service.

NORTHEASTERN U.S. (MAINE THROUGH VIRGINIA) MARINE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY SPECIES GROUP, 1974

Species group	Quantity (1)	Species group	Quantity (1)
Finfish	Thousand pounds	Finfish - continued	Thousand pounds
Bass, black sea	3,535	Tautog	10,803
Bluefish	127,763	Other	24,001
Cod, Atlantic	27,266	Total	357,128
Croakers	2,272		
Eel, American	2,220	Shellfish	
Flounders, summer	34,900		
Flounder, winter	18,884	Clams, hardshell	38,547
Mackerels, Atlantic	16,846	Clams, softshell	7,396
Perches	7,821	Crabs	28,570
Pollock	1,094	Lobsters	5,286
Scup	6,121	Mussels	5,872
Searobins	3,235	Other (2)	3,467
Seatrout, gray	20,148	Total	89,138
Sharks	6,374		
Spot	4,025		
Striped bass	39,820		

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. Shellfish are in terms of live weight including shells. (2) Includes oysters, scallops, and shrimp.

Source:--Unpublished data from the Northeastern Regional Survey of Recreational Fishing in Salt Water, 1973-1974, U.S. Department of Commerce, National Marine Fisheries Service.

SOUTHEASTERN U.S. (NORTH CAROLINA THROUGH TEXAS) MARINE RECREATIONAL FISHERY: ESTIMATED CATCH OF FINFISH AND SHELLFISH, BY SPECIES GROUP, 1975

Species group	Quantity (1)	Species group	Quantity (1)
Finfish	Thousand pounds	Finfish - continued	Thousand pounds
Bluefish	8,557	Snappers, other	17,713
Catfishes	10,019	Snook	6,967
Croakers	17,193	Spot	5,933
Dolphins	7,547	Other	61,609
Drum, black	6,173	Total	352,498
Drum, red	33,503		
Flounders	6,304	Shellfish	
Groupers	26,624		
Jacks	11,368	Clams	22,472
Mackerel, king	11,942	Crabs	26,483
Mackerels, Spanish	9,878	Oysters	26,244
Mullet	6,739	Shrimp	23,008
Seatrout, sand	9,704	Other (2)	5,264
Seatrout, spotted	57,474	Total	103,471
Sharks	15,444		
Sheepshead	10,448		
Snappers, red	11,359		

(1) Quantities of fish are in terms of round (live) weight of fish caught, but not necessarily brought ashore. Shellfish are in terms of live weight including shells. (2) Includes conchs, lobsters, mussels, and scallops.

Source:--Unpublished data from the Southeastern Regional Survey of Recreational Fishing in Salt Water, 1974-1975, U.S. Department of Commerce, National Marine Fisheries Service.

U.S. AND WORLD COMMERCIAL FISHERY CATCHES, 1950-77

Year	U.S. commercial catch and exvessel value			World commercial catch				
	Published by U.S. (excludes weight of mollusk shells)	Published by FAO (includes weight of mollusk shells)	Exvessel value	Freshwater	Marine			Grand total
					Peruvian anchovy	Other (1)	Total	
	Million metric tons		Billion dollars	Million metric tons				
	Live weight			Live weight				
1950	2.2	2.6	0.3	2.4	-	18.7	18.7	21.1
1951	2.0	2.4	.4	2.6	-	20.9	20.9	23.5
1952	2.0	2.4	.4	2.8	-	22.3	22.3	25.1
1953	2.0	2.7	.4	3.0	-	22.9	22.9	25.9
1954	2.2	2.8	.4	3.2	-	24.4	24.4	27.6
1955	2.2	2.8	.3	3.4	-	25.5	25.5	28.9
1956	2.4	3.0	.4	3.5	0.1	27.2	27.3	30.8
1957	2.2	2.8	.4	3.9	.3	27.5	27.8	31.7
1958	2.2	2.7	.4	4.5	.8	28.0	28.8	33.3
1959	2.3	2.9	.4	5.1	2.0	29.8	31.8	36.9
1960	2.2	2.8	.4	5.6	3.5	31.1	34.6	40.2
1961	2.4	2.9	.4	5.7	5.3	32.6	37.9	43.6
1962	2.4	3.0	.4	5.8	7.1	31.9	39.0	44.8
1963	2.2	2.8	.4	5.9	7.2	33.5	40.7	46.6
1964	2.1	2.6	.4	6.2	9.8	35.9	45.7	51.9
1965	2.2	2.7	.4	7.0	7.7	38.5	46.2	53.2
1966	1.9	2.5	.5	7.3	9.6	40.4	50.0	57.3
1967	1.8	2.4	.4	7.2	10.5	42.7	53.2	60.4
1968	1.9	2.5	.5	7.4	11.3	45.2	56.5	63.9
1969	1.9	2.5	.5	7.6	9.7	45.4	55.1	62.7
1970	2.2	2.9	.6	8.4	13.1	49.2	62.3	70.7
1971	2.3	3.0	.7	9.0	11.2	51.1	62.3	71.3
1972	2.2	2.8	.7	9.3	4.8	52.8	57.6	66.9
1973	2.2	2.9	.9	9.5	1.7	56.5	58.2	67.7
1974	2.3	2.9	.9	9.5	4.0	57.8	61.8	71.3
1975	2.2	2.9	1.0	9.9	3.3	57.8	61.1	71.0
1976	2.4	3.2	1.4	9.7	4.3	60.7	65.0	74.7
1977	2.4	3.1	1.5	9.8	.8	62.9	63.7	73.5

(1) Includes diadromous (salmon and other anadromous fishes and catadromous fishes such as eels). There are 2,204.6 pounds in a metric ton.

Source:--Fishery Statistics of the United States, Fisheries of the United States, Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, various issues.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY COUNTRIES, 1973-77

Country	1973	1974	1975	1976 (1)	1977
	Thousand metric tons				
	Live weight				
Japan	10,748	10,805	10,524	10,662	10,733
USSR	8,619	9,236	9,936	10,134	9,352
China, mainland	(2)6,880	(2)6,880	(2)6,880	(2)6,880	(2)6,880
Norway	2,987	2,645	2,550	3,435	3,562
United States	(3)2,858	(3)2,929	(3)2,898	(3)3,176	(3)3,102
India	1,958	2,255	2,328	2,400	2,540
Peru	2,328	4,145	3,447	4,343	2,530
Republic of Korea	1,684	2,024	2,134	2,405	2,419
Denmark	1,465	1,835	1,767	1,912	1,807
Thailand	1,679	1,516	1,553	1,660	1,778
North Korea	(2)1,300	(2)1,400	(2)1,500	(2)1,600	(2)1,600
Indonesia	1,265	1,336	1,390	1,483	1,545
Philippines	1,304	1,371	1,443	1,393	1,511
Spain	1,578	1,510	1,515	1,475	1,455
Iceland	902	945	995	986	1,374
Chile	691	1,157	929	1,406	1,285
Canada	1,157	1,037	1,021	1,132	1,280
Vietnam	(2)1,014	(2)1,014	(2)1,014	(2)1,014	(2)1,014
Bangladesh	820	822	823	826	835
Brazil	704	740	772	708	(2)790
France	814	808	806	806	760
Mexico	479	442	499	572	670
Poland	580	679	801	750	665
Malaysia	445	526	474	517	619
Republic of South Africa	710	650	637	638	603
England and Wales	557	534	497	520	525
Burma	463	434	485	502	519
Nigeria	466	473	478	495	506
Ecuador	154	174	263	315	476
Scotland	562	538	468	503	452
Federal Rep. of Germany	478	526	442	454	432
Italy	401	426	406	420	427
Namibia (S.W. Africa)	(2)710	(2)840	(2)761	(2)574	(2)404
Argentina	302	296	229	282	393
Ghana	224	220	255	238	383
Netherlands	344	326	351	285	313
Portugal	478	430	375	346	310
All others	7,570	7,416	7,358	7,470	7,652
Total	67,678	71,340	71,004	74,717	73,501

(1) Revised.
(2) Data estimated by FAO.
(3) Includes the weight of clams, oysters, scallops, and other mollusk shells. This weight is not included in U.S. landings statistics shown elsewhere.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1977, Vol. 44.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY CONTINENTS, 1974-77

Continent	1974	1975	1976	1977
	Thousand metric tons			
	Live weight			
Asia	31,774	31,919	32,717	33,410
Europe	12,756	12,629	13,535	13,599
USSR	9,236	9,936	10,134	9,352
South America	6,775	5,920	7,340	5,783
North and Central America	4,892	4,915	5,485	5,705
Africa	4,803	4,481	4,315	4,253
Oceania	303	256	298	321
Other	801	948	893	1,078
Total	71,340	71,004	74,717	73,501

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1977, Vol. 44.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY MAJOR FISHING AREAS, 1974-77

Area	1974	1975	1976	1977
	Thousand metric tons			
	Live weight			
Marine areas:				
Pacific Ocean and adjacent areas	31,778	31,427	33,836	32,586
Atlantic Ocean and adjacent areas	25,969	25,685	26,898	26,424
Indian Ocean and adjacent areas	3,283	3,218	3,374	3,733
Total (1)	61,030	60,331	64,108	62,743
Inland waters:				
Asia	7,455	7,572	7,672	7,770
Africa	1,414	1,469	1,495	1,525
USSR	773	944	770	771
Europe	266	282	290	304
South America	235	250	222	225
North and Central America	154	142	145	147
Oceania	13	14	15	16
Total (1)	10,310	10,673	10,610	10,758
Grand total	71,340	71,004	74,717	73,501

(1) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO); Yearbook of Fishery Statistics, 1977, Vol. 44.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, MOLLUSKS, AND OTHER AQUATIC PLANTS AND ANIMALS (EXCEPT WHALES AND SEALS), BY SPECIES GROUPS, 1974-77

Species group	1974	1975	1976	1977
	Thousand metric tons			
	Live weight			
Herring, sardines, anchovies, et al.	14,040	13,754	15,303	12,962
Cods, hakes, haddocks, et al.	12,681	11,850	12,136	10,695
Freshwater fishes	9,496	9,860	9,663	9,769
Miscellaneous marine and diadromous fishes	8,910	8,648	9,003	8,970
Jacks, mullets, sauries, et al.	5,353	5,854	7,253	8,683
Redfish, basses, congers, et al.	4,795	4,967	4,861	5,139
Mollusks	3,463	3,803	4,065	4,224
Mackerels, snoeks, cutlassfishes, et al.	3,611	3,606	3,300	3,557
Tunas, bonitos, billfishes, et al.	2,253	2,095	2,294	2,334
Crustaceans	2,014	1,976	2,154	2,331
Miscellaneous aquatic plants and animals	1,662	1,464	1,563	1,660
Flounders, halibuts, soles, et al.	1,176	1,145	1,123	1,084
Shads, milkfishes, et al.	745	757	780	772
Salmon, trouts, smelts, et al.	502	551	556	633
Sharks, rays, chimaeras, et al.	559	590	565	587
River eels	55	55	67	71
Sturgeons, paddlefishes, et al.	25	27	31	32
Total (1)	71,340	71,004	74,717	73,501

(1) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1977, Vol. 44.

DISPOSITION OF WORLD COMMERCIAL CATCH (EXCEPT WHALES AND SEALS), 1973-77

Item	1973	1974	1975	1976	1977
	Percent of Total				
Marketed fresh	30.1	29.4	28.7	27.9	30.5
Frozen	17.4	16.4	16.8	17.4	17.1
Cured	11.8	11.4	11.7	11.2	11.1
Canned	13.8	13.2	13.4	13.0	13.3
Reduced to meal and oil	25.4	28.2	28.0	29.1	26.6
Miscellaneous purposes	1.5	1.4	1.4	1.4	1.4
Total	100.0	100.0	100.0	100.0	100.0

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1977, Vol. 45.

WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1973-77

Country	1973	1974	1975	1976	1977
	Thousand U.S. dollars				
IMPORTS					
Japan	1,019,427	1,050,306	1,218,062	1,783,926	2,295,503
United States	1,392,328	1,518,599	1,381,271	1,890,869	2,085,845
France	368,813	404,968	489,030	540,895	674,909
Federal Republic of Germany	430,142	513,809	490,344	535,598	666,241
United Kingdom	504,998	446,655	434,354	512,703	556,205
Italy	282,222	306,239	310,673	387,828	426,308
Netherlands	135,599	161,741	172,477	202,395	257,693
Belgium	155,419	175,245	177,762	216,264	256,479
Sweden	160,078	174,857	168,605	195,555	218,833
Hong Kong	123,321	128,664	135,808	182,458	215,172
Canada	109,233	120,135	130,812	183,618	202,489
Denmark	87,844	118,391	115,935	132,122	175,102
Spain	111,450	183,097	151,707	152,572	155,762
Switzerland	91,708	98,319	96,103	107,977	138,551
Australia	70,176	105,475	100,380	90,861	122,978
Singapore	53,761	60,865	71,801	68,704	89,588
Portugal	67,859	105,513	104,750	110,027	86,629
Nigeria	10,738	11,615	62,660	122,846	(1)75,052
Other countries	872,703	1,163,527	1,128,417	1,200,990	1,242,703
Total	6,047,819	6,848,020	6,940,951	8,618,208	9,942,042
EXPORTS					
Norway	514,072	517,162	515,440	654,577	840,728
Canada	490,696	433,360	441,928	598,796	756,595
Republic of Korea	146,219	168,977	361,117	321,468	696,716
Japan	553,928	609,112	489,958	649,373	631,357
Denmark	381,910	439,834	426,772	586,282	627,247
United States	285,192	252,641	298,034	371,899	508,064
Iceland	212,205	248,275	243,530	316,760	381,064
Netherlands	207,881	215,839	258,036	279,790	314,928
Mexico	116,686	135,650	160,557	205,200	277,523
Spain	169,207	208,560	181,914	244,970	236,419
Federal Republic of Germany	139,278	157,500	139,039	181,042	230,689
Peru	155,135	255,911	212,586	212,868	211,268
India	96,405	95,088	132,879	192,601	205,727
United Kingdom	113,863	138,272	134,207	153,382	197,063
USSR	122,675	162,058	212,159	198,448	195,198
Thailand	81,108	75,935	102,694	150,378	175,039
France	102,131	109,959	110,593	136,796	162,712
Indonesia	62,224	89,160	83,318	124,224	153,126
Other countries	1,588,763	1,700,851	1,800,652	2,215,569	2,451,989
Total	5,539,578	6,014,144	6,305,413	7,794,423	9,253,452

(1) Estimated by FAO.

Note:--Data on imports and exports cover the international trade of 162 countries. Among the countries excluded, only mainland China has significant exports. The total value of exports is consistently less than the total value of imports, probably because charges for insurance, freight, and similar expenses were included in the import value but not in the export value. The seven fishery commodity groups covered by this table are: 1. Fish, fresh, chilled or frozen; 2. Fish, dried, salted, or smoked; 3. Crustaceans and mollusks, fresh, frozen, dried, salted, etc.; 4. Fish products and preparations, whether or not in airtight containers; 5. Crustacean and mollusk products and preparations, whether or not in airtight containers; 6. Oils and fats, crude or refined, of aquatic animal origin; and 7. Meals, solubles, and similar animal foodstuffs, of aquatic animal origin.

Source:--Food and Agriculture Organization of the United Nations (FAO), Yearbook of Fishery Statistics, 1977, Vol. 45.

VALUE OF PROCESSED FISHERY PRODUCTS, 1977 AND 1978
(Processed from domestic catch and imported products)

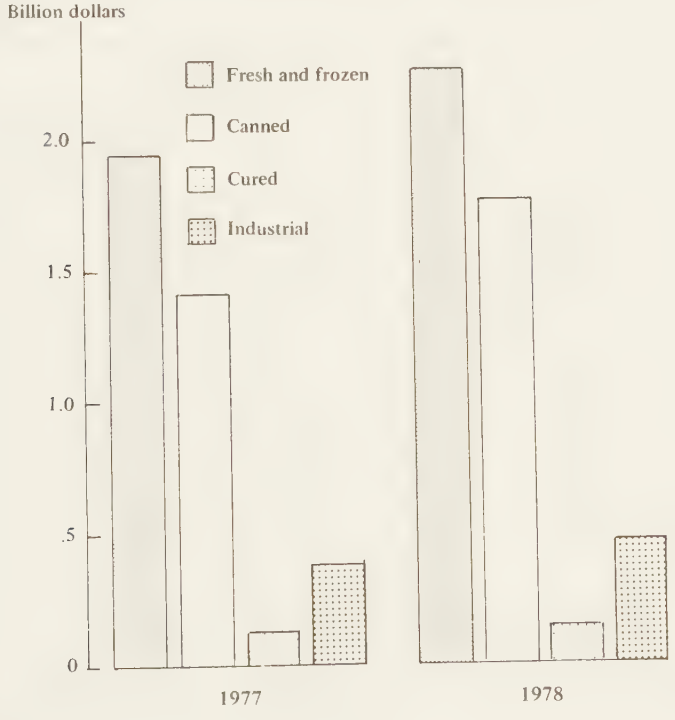
Item	1977 (1)		1978 (1)	
	Thousand dollars	Percent of total	Thousand dollars	Percent of total
Edible:				
Fresh and frozen:				
Fillets and steaks, raw.	191,822	5.0	208,869	4.5
Sticks	68,727	1.8	84,975	1.8
Portions	341,760	8.8	412,037	8.9
Breaded shrimp	216,551	5.6	251,801	5.4
Other	1,128,491	29.2	1,300,000	28.0
Total	1,947,351	50.4	2,257,682	48.6
Canned	1,404,534	36.4	1,754,211	37.8
Cured	138,848	3.6	148,000	3.2
Total edible	3,490,733	90.4	4,159,893	89.6
Industrial:				
Bait and animal food (canned)	170,155	4.4	225,513	4.9
Fish meal, oil, and solubles	139,423	3.6	205,306	4.4
Other	62,224	1.6	50,140	1.1
Total industrial	371,802	9.6	480,959	10.4
Grand total	3,862,535	100.0	4,640,852	100.0

(1) Preliminary.

Note:--Includes value of sealskins and the value of imported fish meal that has been further processed. Value is based on selling price at plant. Includes products made from domestic landings and imported products.

VALUE OF PROCESSED FISHERY PRODUCTS, 1977 AND 1978

(Processed from domestic catch and imported products)



PROCESSED FISHERY PRODUCTS

FISH FILLETS AND STEAKS

U.S. PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1977 AND 1978

Species	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Fillets:				
Buffalofish	80	45	91	55
Carp	2,611	1,263	3,126	1,715
Cod	24,562	27,725	23,701	31,328
Cusk	1,905	1,787	1,657	1,914
Flounders	44,587	69,718	41,716	76,050
Groupers	250	544	265	612
Haddock	14,658	21,294	17,319	26,105
Hake	1,549	1,342	1,257	1,535
Halibut	266	436	167	401
Herring, sea	12,657	4,430	20,166	9,770
Lingcod	1,419	1,259	912	835
Mackerel, Spanish	3,330	2,720	3,169	2,733
Ocean perch:				
Atlantic	10,448	10,108	9,515	9,952
Pacific	2,488	1,919	1,299	1,452
Pollock	6,809	5,121	8,939	7,311
Rockfishes	8,625	6,897	7,417	7,383
Sablefish	1,916	988	1,071	649
Salmon	1,638	3,676	514	1,309
Snapper, red	382	1,130	203	506
Whitefish	819	1,767	568	949
Whiting	830	509	919	643
Yellow perch	2,678	6,673	2,043	4,724
Yellow pike	571	903	635	1,554
Unclassified	10,979	9,788	10,122	8,732
Total	156,057	182,042	156,791	198,217
Steaks:				
Cod	(1)	(1)	(1)	(1)
Halibut	2,334	5,468	2,307	6,013
Salmon	1,609	3,412	1,523	3,322
Swordfish	289	630	351	859
Unclassified	99	270	311	458
Total	4,331	9,780	4,492	10,652
Grand total	160,388	191,822	161,283	208,869

(1) Included with cod fillets.

Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 2.1 million lb valued at $1.5 million in 1977 and 2.1 million lb valued at $1.7 million in 1978.

Final data for 1978 will be published in U.S. Production of Fish Fillets and Steaks, Annual Summary, 1978, Current Fishery Statistics No. 7808.

FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP

U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1969-78

Year	Fish sticks		Fish portions		Breaded shrimp	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1969	113,369	51,242	217,071	83,719	105,627	111,960
1970	115,924	57,722	234,247	97,930	104,953	112,166
1971	97,777	56,807	240,196	123,136	104,588	121,213
1972	114,493	61,491	269,204	149,148	107,375	140,933
1973	*127,156	79,818	298,396	198,984	*111,922	176,793
1974	103,059	64,599	276,226	193,830	91,778	142,559
1975	91,166	62,182	295,613	216,253	97,694	176,742
1976	94,169	73,182	344,284	286,240	95,923	202,972
1977	87,230	68,727	355,443	341,760	97,718	216,551
1978	93,158	*84,975	*386,611	*412,037	107,973	*251,801

*Record. Note:--Data for 1969 to 1977 include all firms reporting annually and quarterly. Data for 1978 include only those firms reporting quarterly. Fish Sticks, Fish Portions, and Breaded Shrimp Annual Summary, 1978, Current Fishery Statistics No. 7804 will give additional information.

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1977 AND 1978

Species	Pounds per case	1977 Standard cases	1977 Thousand pounds	1977 Thousand dollars	1978 Standard cases	1978 Thousand pounds	1978 Thousand dollars
For human consumption:							
Fish:							
Gefiltefish	48	268,515	12,889	7,531	267,389	12,834	8,575
Herring and herring specialties	48	138,862	6,665	7,114	95,020	4,561	5,837
Jack mackerel	45	686,445	30,890	11,869	579,377	26,072	7,242
Roe and caviar	48	17,939	861	6,038	18,177	872	4,025
Salmon:							
Natural	48	3,142,156	150,823	243,340	3,421,650	164,239	248,425
Specialties	48	2,917	140	539	1,635	78	401
Sardines, Maine	23.4	1,004,108	23,496	27,205	1,127,171	26,376	35,641
Tuna:							
Solid	21	6,279,135	131,862	239,319	5,599,087	117,580	242,182
Chunks	19.5	20,857,776	406,727	655,140	29,547,641	576,179	1,025,832
Flakes and grated	18	523,326	9,420	12,155	757,577	13,636	19,631
Total tuna	--	27,660,237	548,009	906,614	35,904,305	707,395	1,287,646
Specialties	48	4,136	199	149	6,105	293	274
Tunalike fish	(1)	473,298	9,494	10,635	180,791	3,582	3,571
Other	--	149,283	7,166	5,019	115,149	5,527	4,087
Total fish	--	33,547,896	790,632	1,226,053	41,716,769	951,829	1,605,724
Shellfish:							
Clams:							
Whole and minced (2)	15	760,954	11,414	26,269	689,432	10,341	24,668
Chowder and juice (2)	30	2,068,950	62,068	38,252	1,964,069	58,922	34,927
Specialties	48	148,556	7,131	7,050	89,280	4,285	4,480
Crabs:							
Natural	19.5	257,055	5,013	19,340	255,651	4,985	22,286
Specialties	48	6,882	330	313	7,700	370	369
Oysters:							
Natural (3)	7	146,735	1,027	2,687	84,328	590	1,337
Specialties	48	192,086	9,220	6,423	225,738	10,835	8,592
Shrimp:							
Natural (3)	6.75	3,633,346	24,525	71,336	2,334,509	15,758	45,845
Specialties	48	45,775	2,197	1,942	30,707	1,474	1,305
Squid	48	141,438	6,789	2,218	184,835	8,872	2,502
Other	--	69,051	3,314	2,651	42,408	2,036	2,176
Total shellfish	--	7,470,828	133,028	178,481	5,908,657	118,468	148,487
Total for human consumption	--	41,018,724	923,660	1,404,534	47,625,426	1,070,297	1,754,211
For bait and animal food:							
Animal food	48	10,672,247	512,268	165,686	12,401,543	595,274	222,608
Salmon eggs, et al.	48	8,641	415	4,469	7,505	360	2,905
Total for bait and animal food	48	10,680,888	512,683	170,155	12,409,048	595,634	225,513
Grand total	--	51,699,612	1,436,343	1,574,689	60,034,474	1,665,931	1,979,724

(1) Standard cases 48 cans, solid pack (7 oz net each) contains 21 lb; chunk (6.50 oz net each) 19.5 lb; and flakes and grated (6 oz net each) 18 lb. (2) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products. (3) Drained weight.

Note:--Final figures will be published in Canned Fishery Products, Annual Summary, 1977 and 1978, Current Fishery Statistics No. 7501 and 7801.

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED TUNA, 1976-78

Item	Pounds per case	1976		1977		1978	
		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Albacore:							
Solid	21	4,757	172,680	4,615	183,647	5,031	220,330
Chunk	19.5	950	34,789	1,390	52,198	1,641	64,178
Flakes and grated	18	258	5,400	216	4,889	385	10,202
Total	--	5,965	212,869	6,221	240,734	7,057	294,710
Lightmeat:							
Solid	21	1,496	40,683	1,664	55,672	568	21,852
Chunk	19.5	22,350	589,820	19,468	602,942	27,907	961,654
Flakes and grated	18	493	10,091	307	7,266	372	9,430
Total	--	24,339	640,594	21,439	665,880	28,847	992,936
Grand total	--	30,304	853,463	27,660	906,614	35,904	1,287,646

Note:--Table may not add because of rounding.

PRODUCTION OF CANNED SHRIMP, BY AREA, 1976-78

Area	Pounds per case	1976		1977		1978	
		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Gulf States	6.75	1,651	32,606	2,130	48,271	1,376	30,614
Pacific States	6.75	1,315	16,209	1,503	23,065	959	15,231
Total	6.75	2,966	48,815	3,633	71,336	2,335	45,845

PRODUCTION OF CANNED FISHERY PRODUCTS, 1969-78

Year	For human consumption		For animal food and bait		Total	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1969	716,335	493,059	451,946	82,474	1,168,281	575,533
1970	805,178	632,625	540,713	109,135	1,345,891	741,760
1971	816,227	666,239	512,589	104,358	1,328,816	770,597
1972	930,232	853,495	666,598	141,427	1,596,830	994,922
1973	951,000	996,302	*696,357	170,858	1,647,357	1,167,160
1974	963,232	1,127,416	590,774	178,431	1,554,006	1,305,847
1975	802,112	919,692	583,751	152,253	1,385,863	1,071,945
1976	907,121	1,231,738	660,659	197,955	1,567,780	1,429,693
1977	923,660	1,404,534	512,683	170,155	1,436,343	1,574,689
1978	*1,070,297	*1,754,211	595,634	*225,513	*1,665,931	*1,979,724

*Record.

INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1977 and 1978

Product	1977		1978	
	Short tons	Thousand dollars	Short tons	Thousand dollars
Dried scrap and meal:				
Fish:				
Anchovy	18,871	6,474	2,071	642
Menhaden (1)	193,268	71,785	276,546	96,643
Tuna and mackerel	39,228	10,544	50,244	15,024
Unclassified	21,654	7,347	24,522	8,403
Total	273,021	96,150	353,383	120,712
Shellfish	9,270	1,089	9,173	994
Grand total	282,291	97,239	362,556	121,706
Solubles:				
Menhaden (1)	87,390	9,806	132,007	19,099
Unclassified	34,940	4,139	35,312	3,868
Total	122,330	13,945	167,319	22,967
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Body oil:				
Anchovy	6,176	846	799	95
Menhaden (1)	116,149	25,132	284,031	58,711
Tuna and mackerel	3,807	395	4,358	463
Unclassified (2)	7,055	1,866	5,697	1,364
Total	133,187	28,239	294,885	60,633

(1) May include small quantities made from other species. (2) Includes a small amount of liver oils.

Note:--To convert pounds of oil to gallons divide by 7.75. The above data include production in American Samoa and Puerto Rico. Final data will be published in Industrial Fishery Products, Annual Summary, 1978, Current Fisheries Statistics No. 7802.

PRODUCTION OF INDUSTRIAL PRODUCTS, 1969-78

Year	Quantity			Value			
	Fish meal	Fish solubles	Marine animal oil	Fish meal, solubles, and oil	Shell products (1)	Other industrial products	Grand total
	Short tons	Short tons	Thousand pounds	Thousand dollars			
1969	252,664	81,692	169,785	53,272	4,170	25,562	83,005
1970	269,197	94,968	206,084	69,484	3,409	26,646	99,540
1971	292,812	111,188	265,450	70,377	4,128	32,046	106,551
1972	285,506	134,395	188,445	67,133	4,210	84,639	155,982
1973	287,517	137,435	224,634	160,914	4,015	37,899	202,828
1974	300,714	137,259	237,980	145,325	4,651	48,858	198,834
1975	290,431	127,850	245,653	106,901	5,847	49,550	162,297
1976	309,694	133,107	204,581	142,228	6,085	36,437	184,750
1977	282,291	122,330	133,187	139,423	6,708	44,441	190,572
1978	*362,556	*167,319	294,885	*205,306	4,512	43,133	*252,951

(1) Beginning in 1970, data include only the value of oyster shell products. Data for marine-shell and mussel-shell products are included with "other industrial products."

*Record. Record marine animal oil production, 299.3 million lb in 1936; and shell products, $17.3 million in 1950.

Note:--Does not include the value of imported items that may be further processed, or the value of sealskins. Table may not add because of rounding.

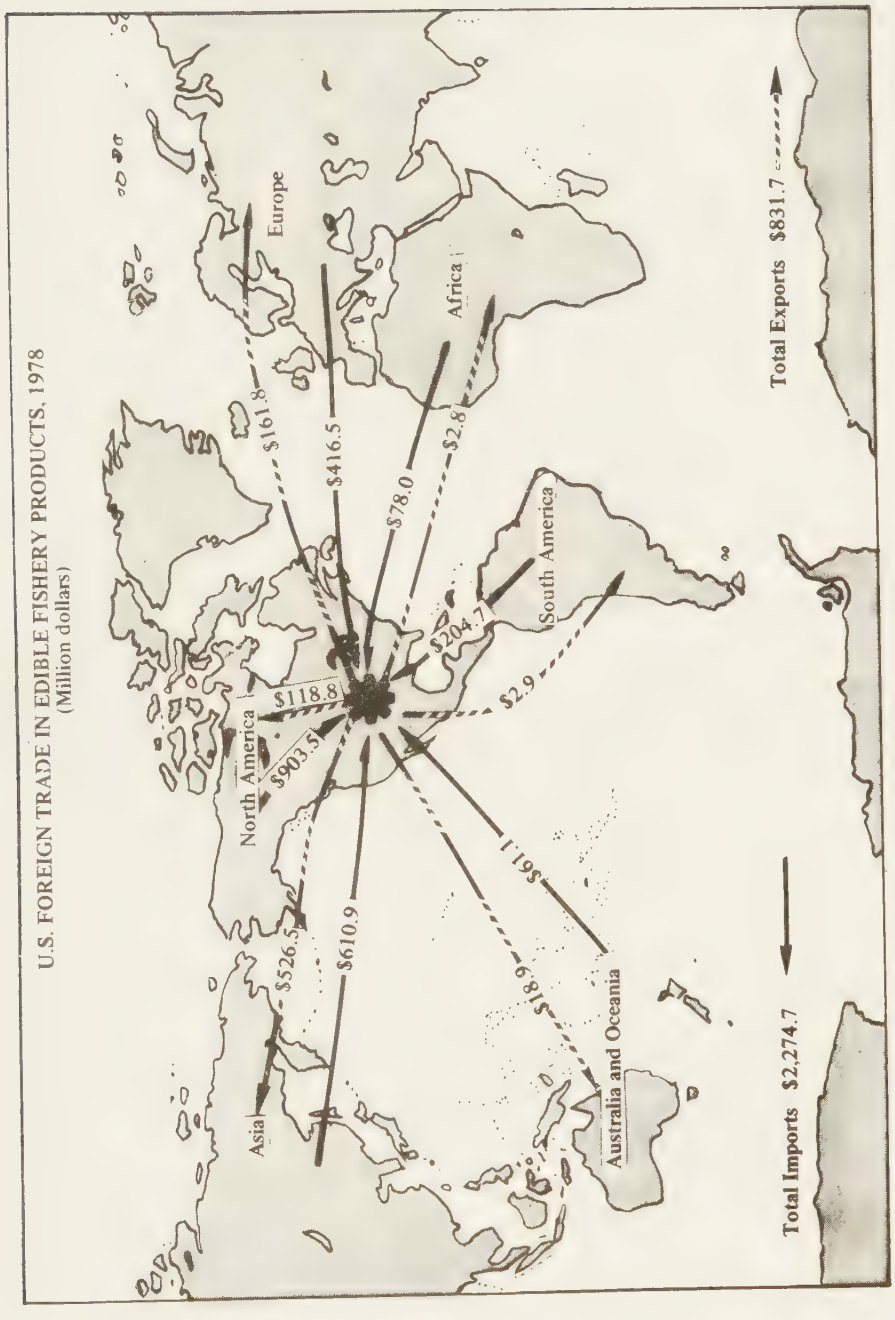
COLD STORAGE HOLDINGS

FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1978

Item	January 1	March 31	June 30	September 30	December 31
	Thousand pounds				
Blocks:					
Cod	36,480	18,990	28,494	52,617	35,508
Flounder	2,810	2,759	2,587	3,613	3,040
Greenland turbot	1,014	543	280	863	589
Haddock	7,961	6,778	5,079	5,103	5,233
Ocean perch	655	154	311	555	1,389
Pollock (Alaska and other)	11,096	5,241	5,027	12,702	16,539
Whiting	3,257	5,032	5,867	5,248	4,532
Minced (grated) all species	4,744	2,209	1,911	4,132	2,056
Unclassified	5,157	2,140	3,062	3,795	3,026
Total blocks	73,174	43,846	52,618	88,628	71,912
Fillets and steaks:					
Cod	27,202	20,404	23,714	29,106	21,723
Flounder	8,997	5,601	6,025	8,133	9,710
Greenland turbot	9,882	6,350	4,727	13,004	14,088
Haddock	7,727	4,789	5,073	5,544	6,261
Ocean perch	9,458	3,786	3,273	8,063	11,476
Whiting	3,842	2,678	2,265	4,575	5,288
Unclassified	20,945	22,681	20,491	31,607	33,557
Total fillets and steaks	88,053	66,289	65,568	100,032	102,103
Fish sticks and portions (cooked and uncooked, all species)	30,484	28,221	34,337	32,618	37,125
Round, dressed, etc:					
Catfish	2,295	1,593	1,579	1,254	1,104
Halibut	3,758	1,462	1,675	5,233	2,739
Rainbow trout	2,267	2,409	1,963	1,482	2,083
Salmon	28,365	14,991	13,250	33,210	25,146
Whiting	1,818	1,448	1,722	3,070	4,237
Unclassified fish	21,740	27,360	23,634	28,077	27,929
Crabs:					
King	23,701	20,598	16,343	12,075	27,058
Snow	3,684	12,234	25,402	16,127	8,150
Unclassified	5,191	5,727	5,695	5,008	6,915
Lobsters (spiny and other)	6,788	6,758	6,847	6,834	8,295
Shrimp:					
Raw, headless	50,347	34,415	24,916	25,274	32,757
Breaded	7,089	5,925	5,624	5,148	6,791
Peeled	18,317	15,629	17,332	16,442	14,138
Unclassified	18,460	14,776	10,842	12,073	11,086
Total shrimp	94,213	70,745	58,714	58,937	64,772
Other shellfish	21,268	17,335	18,095	19,750	22,460
Bait and animal food	13,496	14,599	14,613	12,327	9,447
Total fish and shellfish	420,295	335,615	342,055	424,662	421,475

Note:--Holdings of frozen fishery products include domestic and imported frozen fish and shellfish.


U.S. FOREIGN TRADE IN EDIBLE FISHERY PRODUCTS, 1978
(Million dollars)
Europe
Africa
South America
North America
Asia
Australia and Oceania
$161.8
$416.5
$78.0
$2.8
$204.7
$2.9
$118.8
$903.5
$526.5
$610.9
$18.9
$19.8
Total Exports $831.7
Total Imports $2,274.7

FOREIGN TRADE

U.S. IMPORTS

IMPORTS OF EDIBLE AND NONEDIBLE FISHERY PRODUCTS, 1969-78

Year	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars	Thousand dollars	
1969	1,706,571	704,809	139,484	844,293
1970	1,873,300	812,530	224,880	1,037,410
1971	1,785,470	887,070	187,131	1,074,201
1972	2,341,138	1,233,292	261,119	1,494,411
1973	2,416,193	1,398,484	184,649	1,583,133
1974	2,266,880	1,495,380	215,498	1,710,878
1975	1,913,089	1,367,180	269,919	1,637,099
1976	2,228,475	1,916,848	415,497	2,332,345
1977	2,177,010	2,078,492	543,699	2,622,191
1978	*2,420,765	*2,274,717	*824,559	*3,099,276

*Record.
Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF FISHERY PRODUCTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1969-78

Year	Value		Duties collected		Average ad valorem equivalent	
	Fishery imports	All imports	Fishery imports	All imports	Fishery imports	All imports
	Thousand dollars				Percent	
1969	844,293	35,870,400	25,421	2,551,200	3.0	7.1
1970	1,037,410	39,767,700	25,175	2,584,100	2.4	6.5
1971	1,074,201	45,545,900	(1)22,455	(1)2,768,000	2.1	6.1
1972	1,494,411	55,555,300	24,292	3,124,000	1.6	5.6
1973	1,583,133	68,655,100	25,835	3,459,000	1.6	5.0
1974	1,710,878	100,125,800	29,815	3,772,000	1.7	3.8
1975	1,637,099	96,515,102	26,675	3,780,000	1.6	3.9
1976	2,332,345	121,120,869	43,293	4,674,700	1.9	3.9
1977	2,622,191	147,075,300	58,252	5,484,800	2.2	3.7
1978	3,099,276	172,952,200	88,240	7,161,500	2.8	4.1

(1) These calculated duties do not include the temporary surcharge imposed by the President under Proclamation No. 4074, effective August 16, 1971, and terminating December 20, 1971.
Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. IMPORTS

IMPORTS OF FISHERY PRODUCTS, BY PRINCIPAL ITEMS, 1977 AND 1978

Item	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Edible fishery products:				
Fresh and frozen:				
Fillets:				
Groundfish	217,423	210,478	233,099	240,067
Other	180,687	160,908	190,519	178,365
Total	398,110	371,386	423,618	418,432
Blocks and slabs	385,138	291,694	406,286	325,367
Halibut	6,510	9,086	6,955	10,779
Salmon	5,708	10,794	6,617	13,562
Tuna:				
Albacore	178,298	107,736	199,331	122,436
Other	451,078	142,716	602,229	198,155
Loins and discs	3,927	4,871	6,679	6,564
Crabmeat	4,283	8,936	4,681	15,190
Scallops (meats)	29,786	53,040	28,367	72,829
Lobsters:				
American (includes fresh-cooked meat)	14,992	33,897	13,150	33,813
Spiny	45,027	216,405	43,034	222,474
Shrimp	225,208	488,326	195,475	418,354
Other	180,764	76,014	199,550	89,754
Canned:				
Herring, not in oil	10,841	8,380	7,635	8,315
Salmon	586	1,171	325	693
Sardines:				
In oil	25,748	25,031	24,231	25,490
Not in oil	24,288	12,430	24,486	14,580
Tuna:				
In oil	178	311	207	432
Not in oil	34,453	44,347	51,575	63,389
Bonito and yellowtail:				
In oil	17	25	168	157
Not in oil	1,358	1,007	220	207
Abalone	4,994	17,975	3,930	15,268
Clams	7,799	9,184	4,739	6,089
Crabmeat	3,463	7,957	4,053	9,503
Lobsters:				
American	2,547	14,225	2,295	15,215
Spiny	337	1,371	125	455
Oysters	19,159	17,908	23,522	24,547
Shrimp	2,809	3,203	2,739	3,370
Other	43,078	45,977	46,425	51,684
Cured:				
Pickled or salted:				
Cod, haddock, hake, etc.	35,727	33,449	37,606	38,291
Herring	19,475	6,924	24,958	13,639
Other	6,814	8,574	6,919	9,653
Other fish and shellfish	4,510	4,142	18,635	26,031
Total edible fishery products	2,177,010	2,078,492	2,420,765	2,274,717
Nonedible fishery products:				
Scrap and meal	162,982	26,488	87,802	12,577
Solubles	312	36	380	44
Other	-	517,175	-	811,938
Total nonedible fishery products	-	543,699	-	824,559
Grand total	-	2,622,191	-	3,099,276

Note:--Data include imports into the United States and Puerto Rico and include landings of tuna by foreign vessels in American Samoa.
Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. IMPORTS

IMPORTS OF EDIBLE AND NONEDIBLE FISHERY PRODUCTS, 1978

Continent and country	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars	- - - Thousand dollars - - -	
North America:				
Canada	534,282	513,619	29,794	543,413
Mexico	143,869	222,744	13,615	236,359
Panama	41,668	41,190	1,993	43,183
Nicaragua	16,635	31,509	-	31,509
Greenland	21,562	18,952	27	18,979
Honduras	5,934	16,531	3	16,534
Other	57,542	58,911	8,518	67,429
Total	821,492	903,456	53,950	957,406
South America:				
Brazil	38,902	63,193	4,447	67,640
Ecuador	41,014	40,039	268	40,307
Argentina	37,641	19,950	6,719	26,669
Chile	10,226	17,516	4,028	21,544
Colombia	4,510	12,306	3,894	16,200
Other	74,480	51,679	12,044	63,723
Total	206,773	204,683	31,400	236,083
Europe:				
European Economic Community:				
Italy	1,258	1,229	355,854	357,083
Denmark	83,017	78,564	6,523	85,087
Federal Republic of Germany	3,115	3,034	45,940	48,974
United Kingdom	9,989	12,911	33,643	46,554
Other	29,400	24,493	24,273	48,766
Total	126,779	120,231	466,233	586,464
Other:				
Iceland	162,053	167,863	220	168,083
Norway	86,099	87,993	1,916	89,909
Switzerland	52	80	37,736	37,816
Spain	30,895	16,576	17,674	34,250
Other	22,530	23,773	18,620	42,393
Total	301,629	296,285	76,166	372,451
Asia:				
Japan	284,238	202,562	54,265	256,827
Hong Kong	9,875	15,281	65,661	80,942
Republic of Korea	103,527	73,467	5,385	78,852
China, Taiwan	76,667	51,471	13,115	64,586
India	44,675	53,987	2,603	56,590
Other	230,604	148,609	49,569	198,178
Total	749,586	545,377	190,598	735,975
Australia and Oceania:				
Australia	10,936	65,545	945	66,490
New Zealand	9,367	20,181	121	20,302
New Guinea	51,916	16,090	1	16,091
British Pacific Islands	18,978	12,167	-	12,167
Other	27,063	12,660	1,737	14,397
Total	118,260	126,643	2,804	129,447
Africa:				
Republic of South Africa	25,188	43,627	1,685	45,312
Ivory Coast	17,510	7,166	2	7,168
Ghana	17,782	5,348	-	5,348
Congo (Brazzaville)	15,903	5,109	-	5,109
Other	19,863	16,792	1,721	18,513
Total	96,246	78,042	3,408	81,450
Grand total	2,420,765	2,274,717	824,559	3,099,276

Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. IMPORTS

IMPORTS OF REGULAR AND MINCED FISH BLOCKS AND SLABS, BY SPECIES AND TYPE, 1977 AND 1978

Species and type	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Regular blocks and slabs:				
Cod	204,872	183,371	204,696	190,971
Flatfish:				
Turbot	4,594	2,944	4,352	2,684
Other	10,496	11,274	12,425	12,347
Haddock	30,815	27,023	27,026	26,101
Ocean perch, Atlantic	2,291	1,516	3,084	2,405
Pollock	82,960	41,680	81,294	50,560
Whiting	22,402	11,137	39,817	22,885
Other	8,091	6,063	14,231	9,730
Total	366,521	285,008	386,925	317,683
Minced blocks and slabs: (1)	18,617	6,686	19,361	7,684
Grand total	385,138	291,694	406,286	325,367

(1) Most of the shipments were from Canada, Iceland, and Denmark.
Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF REGULAR AND MINCED FISH BLOCKS AND SLABS, BY COUNTRY OF ORIGIN, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Canada	80,283	67,917	101,578	84,546
Iceland	62,927	51,668	65,945	58,789
Denmark	69,152	57,846	62,290	54,641
Norway	47,163	38,133	45,753	40,177
Republic of Korea	43,744	20,684	52,471	30,898
Greenland	14,500	11,906	19,501	16,967
Argentina	14,931	6,835	26,128	14,168
Other	52,438	36,705	32,620	25,181
Total	385,138	291,694	406,286	325,367

Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF GROUNDFISH FILLETS AND STEAKS, BY SPECIES, 1977 AND 1978 (1)

Species	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Cod	122,267	126,343	135,000	145,932
Haddock (2)	49,917	45,171	50,538	49,729
Ocean perch, Atlantic	45,239	38,964	47,561	44,406
Total	217,423	210,478	233,099	240,067

(1) Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets.
Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

U.S. IMPORTS

UNDER-QUOTA AND OVER-QUOTA IMPORTS OF GROUNDFISH FILLETS AND STEAKS, 1969-78 (1)

Year	Imports		
	Under-quota (2)	Over-quota (3)	Total
	Thousand pounds		
1969	26,466	133,514	159,980
1970	27,401	158,706	186,107
1971	30,329	141,123	171,452
1972	31,832	181,423	213,255
1973	34,125	185,971	220,096
1974	35,456	129,895	165,351
1975	35,695	164,661	200,356
1976	36,149	192,138	228,287
1977	35,437	181,986	217,423
1978	39,025	194,074	233,099

(1) Includes Atlantic ocean perch.
(2) Dutiable at 1.875 cents per lb. Quota was filled in all years.
(3) Dutiable at 2.5 cents per lb.

Source:--Data on under-quota imports from U.S. Department of the Treasury, Bureau of Customs. Imports over quota calculated from imports reported by U.S. Department of Commerce, Bureau of the Census.

QUOTA AND IMPORTS OF CANNED TUNA NOT IN OIL, 1969-78

Year	Quota (1)	Imports	
		Under quota (2)	Over quota (3)
	Thousand pounds		
1969	71,703	71,333	-
1970	70,146	70,146	-
1971	77,296	55,638	902
1972	78,532	54,474	-
1973	109,809	36,973	-
1974	112,176	52,172	-
1975	120,740	48,847	-
1976	98,125	56,409	-
1977	111,246	33,913	-
1978	101,407	50,031	-

(1) Imports have been subject to tariff quotas since April 14, 1956, and are based on 20 percent of the previous year's domestic pack excluding American Samoa.
(2) Dutiable in 1956 to 1967 at 12.5 percent ad valorem; 1968, 11 percent; 1969, 10 percent; 1970, 8.5 percent; 1971, 7 percent; and in 1972 to 1978, 6 percent.
(3) Dutiable in 1970 at 17 percent ad valorem; 1971, 15 percent; and 1972 to 1978, 12.5 percent ad valorem.

Source:--U.S. Department of the Treasury, Bureau of Customs. Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census.

U.S. IMPORTS

IMPORTS OF SHRIMP, BY COUNTRY OF ORIGIN, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
North America:				
Mexico	76,252	187,922	72,451	170,494
Panama	10,069	27,551	9,153	27,541
Nicaragua	7,387	19,392	5,575	15,580
El Salvador	5,376	12,033	4,973	12,398
Guatemala	3,752	8,663	4,164	10,572
Honduras	4,718	10,263	3,488	8,347
Costa Rica	1,307	2,825	1,073	1,896
Canada	1,570	1,403	997	1,634
Canal Zone	793	2,198	1,108	1,538
Trinidad	1,246	3,651	540	1,329
Other	5,968	6,031	719	1,309
Total	118,438	281,932	104,241	252,838
South America:				
Ecuador	8,613	23,996	10,946	30,033
Colombia	5,666	14,481	4,191	11,422
Surinam	3,652	13,246	2,000	6,849
Guyana	4,647	9,468	3,363	6,759
Brazil	3,538	7,170	3,899	5,664
Venezuela	2,825	8,300	1,271	3,742
French Guiana	1,560	4,778	1,715	3,465
Chile	163	330	299	867
Peru	772	911	531	743
Argentina	3	6	4	13
Total	31,439	82,686	28,219	69,557
Europe:				
European Economic Community:				
Netherlands	351	464	317	709
United Kingdom	405	958	26	118
Denmark	770	718	58	116
Belgium	-	-	31	48
Federal Republic of Germany	-	-	26	40
Other	211	631	-	-
Total	1,737	2,771	458	1,031
Other:				
Spain	299	1,387	221	1,241
Norway	9	31	17	58
Austria	-	-	10	31
Sweden	14	22	3	17
Gibraltar	-	-	6	8
Iceland	24	37	1	6
Romania	71	85	2	4
Finland	-	-	1	3
Other	-	-	-	1
Total	417	1,562	261	1,369
Asia:				
India	41,111	49,775	39,160	44,788
Thailand	4,207	8,523	3,948	8,733
Bangladesh	3,360	8,249	3,452	8,631
Hong Kong	3,881	8,827	3,610	7,699
Indonesia	4,571	7,954	3,771	6,076
China, Taiwan	3,592	5,759	3,206	4,941
Iran	2,953	7,501	1,001	2,434
Sri Lanka	1,257	2,632	1,072	1,774
Republic of Philippines	686	1,252	768	1,412
Malaysia	2,246	3,701	918	1,393
Pakistan	764	1,319	810	1,382
Kuwait	1,313	3,697	483	1,287
Other	2,690	5,065	1,326	2,942
Total	72,631	114,254	63,525	93,492
Australia and Oceania	832	3,094	190	890
Africa	2,523	5,230	1,320	2,547
Grand total	228,017	491,529	198,214	421,724

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

U.S. IMPORTS

IMPORTS OF SHRIMP, BY TYPE OF PRODUCT, 1977 AND 1978

Type of product	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Shell-on (heads off)	125,805	295,898	101,266	241,290
Peeled:				
Canned	2,809	3,203	2,739	3,370
Not breaded:				
Raw	87,818	173,744	83,126	160,047
Other	10,860	17,291	10,656	16,143
Breaded	725	1,393	427	874
Total	228,017	491,529	198,214	421,724

Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF FISH MEAL AND SCRAP, BY COUNTRY OF ORIGIN, 1977 AND 1978

Country	1977		1978	
	Short tons	Thousand dollars	Short tons	Thousand dollars
Canada	24,811	7,340	32,724	8,819
Peru	15,578	4,102	6,614	2,183
Panama	13,628	3,944	4,297	1,420
Japan	64	46	152	113
Miquel	462	182	113	41
United Kingdom	-	-	1	1
Other	26,948	10,874	-	-
Total	81,491	26,488	43,901	12,577

Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS OF COD LIVER FISH SOLUBLES, BY COUNTRY OF ORIGIN, 1977 AND 1978

Country	1977		1978	
	Short tons	Thousand dollars	Short tons	Thousand dollars
Canada, total	156	36	190	44

Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY PRINCIPAL ITEMS, 1977 AND 1978

Item	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Edible fishery products:				
Fresh and frozen:				
Whole or eviscerated:				
Salmon	65,559	117,504	122,180	268,582
Other	85,559	36,942	70,332	48,912
Fillets:				
Salmon	4,285	7,892	3,591	7,675
Other	25,265	17,262	29,896	22,047
Fish sticks and portions	(1)	(1)	1,052	1,388
Shellfish:				
Shrimp	26,089	60,731	34,801	88,184
King crab	10,182	28,984	30,266	105,424
Snow crab	22,086	29,761	31,704	47,390
Other	16,096	22,580	23,901	35,458
Canned fish and shellfish:				
Mackerel	1,244	327	9,560	10,446
Salmon	21,275	34,031	32,513	49,240
Sardines	1,186	855	1,555	1,533
Shrimp	8,966	18,066	5,984	12,084
King crab	268	1,484	462	3,076
Squid	5,045	1,411	10,566	3,349
Other	14,547	20,931	5,082	10,496
Cured	23,081	73,892	11,445	9,676
Other fish and shellfish	326	722	23,421	106,694
Total edible fishery products	331,059	473,375	448,311	831,654
Nonedible fishery products:				
Fish meal	72,206	12,584	101,400	17,468
Fish oils	90,633	18,107	222,012	42,340
Seal furs	(2)	2,833	(2)	1,866
Other	-	(3)13,597	-	(3)12,206
Total nonedible fishery products	-	47,121	-	73,880
Grand total	-	520,496	-	905,534

(1) Not available in 1977.
(2) Number of seal furs was 32,000 in 1977 and 22,000 in 1978.
(3) Includes the value of whale and sperm oil.
Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1969-78

Year	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars		
1969	140,646	86,474	18,059	104,533
1970	140,375	93,878	23,606	117,484
1971	171,816	113,637	25,608	139,245
1972	171,642	134,188	23,700	157,888
1973	238,942	241,866	57,302	299,168
1974	178,010	194,966	67,166	262,132
1975	218,152	267,360	37,369	304,729
1976	240,866	329,810	54,880	384,690
1977	331,059	473,375	47,121	520,496
1978	*448,311	*831,654	*73,880	*905,534

*Record.
Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1978

Country	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars	Thousand dollars	Thousand dollars
North America:				
Canada	68,470	86,072	3,758	89,830
Mexico	11,689	23,225	228	23,453
Netherlands Antilles	1,743	2,716	8	2,724
Bahamas	1,239	1,796	81	1,877
Bermuda	960	1,808	32	1,840
Dominican Republic	237	280	363	643
Panama	379	499	8	507
French West Indies	589	391	46	437
Jamaica	717	404	10	414
Trinidad	256	267	112	379
Honduras	1,059	348	8	356
British Virgin Islands	181	266	24	290
Cayman Island	208	209	-	209
Belize	65	168	5	173
Barbados	72	146	1	147
Guatemala	82	121	23	144
Haiti	41	39	7	46
Costa Rica	25	32	6	38
Nicaragua	120	31	6	37
El Salvador	7	18	10	28
Turks and Caicos Islands	2	-	2	2
Total	88,141	118,836	4,738	123,574
South America:				
Colombia	175	325	3,416	3,741
Venezuela	2,462	2,235	83	2,318
Surinam	131	105	6	111
Argentina	70	46	39	85
Brazil	7	51	4	55
Ecuador	17	41	5	46
Chile	12	23	13	36
Bolivia	10	26	-	26
Peru	2	7	2	9
Guyana	11	5	-	5
Uruguay	5	5	-	5
Paraguay	2	1	-	1
Total	2,904	2,870	3,568	6,438
Europe:				
European Economic Community:				
France	21,711	47,085	702	47,787
Federal Republic of Germany	26,810	20,218	20,122	40,340
United Kingdom	18,458	29,582	10,549	40,131
Netherlands	11,501	20,401	15,463	35,864
Belgium and Luxembourg	7,006	12,915	1,568	14,483
Denmark	2,267	4,952	22	4,974
Italy	2,609	4,329	444	4,773
Ireland	36	48	-	48
Total	90,398	139,530	48,870	188,400
Other:				
Sweden	7,758	14,142	1,685	15,827
Greece	8,374	3,546	1	3,547
Switzerland	949	2,758	255	3,013
Spain	806	349	1,465	1,814
Norway	460	1,149	230	1,379
Finland	97	271	12	283
Iceland	45	33	-	33
Portugal	53	31	-	31
Austria	6	16	3	19
Malta and Gozo	1	2	-	2
Total	18,549	22,297	3,651	25,948

(Continued)

U.S. EXPORTS

EXPORTS OF DOMESTIC FISHERY PRODUCTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1978 - Continued

Country	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars		
Asia:				
Japan	210,853	509,303	4,320	513,623
Republic of Korea	12,171	7,290	526	7,816
China, Taiwan	4,526	3,347	332	3,679
Hong Kong	1,760	2,567	551	3,118
Saudi Arabia	897	1,226	540	1,766
Iran	52	97	889	986
Singapore	496	622	300	922
Israel	948	881	24	905
Philippines	1,266	448	1	449
United Arab Emirates	67	139	-	139
Thailand	98	112	23	135
Lebanon	36	116	1	117
Malaysia	42	108	2	110
Indonesia	43	82	2	84
Qatar	30	51	-	51
Kuwait	20	50	-	50
Bahrain	10	29	-	29
China, mainland	-	-	18	18
Gaza strip	14	13	-	13
Oman	4	9	-	9
Sri Lanka (Ceylon)	-	-	6	6
Afghanistan	2	4	-	4
Pakistan	-	1	2	3
Iraq	2	2	-	2
Jordan	-	1	-	1
Brunei	2	1	-	1
Total	233,339	526,499	7,537	534,036
Australia and Oceanic:				
Australia	10,139	16,571	77	16,648
New Zealand	799	1,442	1	1,443
French Pacific Islands	320	545	5	550
Trust Territory of the Pacific Islands	138	137	-	137
Other Pacific Islands	47	132	-	132
Papua New Guinea	19	47	-	47
Western Samoa	3	4	-	4
Total	11,465	18,878	83	18,961
Africa:				
Egypt	2,585	1,175	5,194	6,369
Republic of South Africa	630	1,105	15	1,120
Ghana	5	6	204	210
Canary Islands	64	170	-	170
Liberia	31	112	-	112
Nigeria	63	71	16	87
Guinea	22	44	-	44
Cameroon	40	40	-	40
Zaire	5	16	-	16
Mauritius	-	-	4	4
Central African Republic	69	4	-	4
Namibia	1	1	-	1
Total	3,515	2,744	5,433	8,177
Grand total	448,311	831,654	73,880	905,534

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

U.S. EXPORTS

EXPORTS OF DOMESTIC AND FOREIGN SHRIMP PRODUCTS, 1977 AND 1978

Item	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Fresh and frozen:				
Domestic	26,089	60,731	34,801	88,184
Foreign	8,902	26,643	13,308	44,672
Total	34,991	87,374	48,109	132,856
Canned:				
Domestic	8,966	18,066	5,984	12,084
Foreign	48	144	58	93
Total	9,014	18,210	6,042	12,177
Total:				
Domestic	35,055	78,797	40,785	100,268
Foreign	8,950	26,787	13,366	44,765
Total	44,005	105,584	54,151	145,033

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC FRESH AND FROZEN SHRIMP, BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Canada	8,634	20,610	12,062	28,125
Japan	4,718	11,957	6,284	22,594
Mexico	8,811	19,003	9,894	21,653
Sweden	1,734	3,815	1,867	4,533
Australia	2	6	1,340	3,729
Denmark	428	941	952	2,535
Norway	129	283	326	818
United Kingdom	630	1,474	329	722
Switzerland	96	207	125	278
Other	907	2,435	1,622	3,197
Total	26,089	60,731	34,801	88,184

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC CANNED SHRIMP, BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Canada	6,340	13,076	4,233	8,376
Sweden	493	1,205	217	649
Switzerland	293	582	290	556
Japan	345	526	206	405
France	169	417	143	362
United Kingdom	542	845	244	347
Mexico	-	-	161	320
Australia	368	536	162	230
Other	416	879	328	839
Total	8,966	18,066	5,984	12,084

Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. EXPORTS

EXPORTS OF DOMESTIC FRESH AND FROZEN SALMON, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	31,854	57,422	87,679	197,008
France	12,883	27,634	12,030	30,829
United Kingdom	3,622	5,145	5,950	10,082
Sweden	3,934	5,767	4,103	6,331
Federal Republic of Germany	1,810	4,281	2,114	5,256
Canada	5,466	5,355	3,653	4,719
Belgium	1,783	3,959	1,638	4,101
Netherlands	1,172	2,368	1,690	3,627
Italy	434	1,381	655	2,115
Denmark	1,772	2,827	940	1,686
Republic of Korea	4	9	1,050	1,233
Republic of South Africa	110	181	144	292
Other	715	1,175	534	1,303
Total	65,559	117,504	122,180	268,582

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC FRESH AND FROZEN SALMON FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	1,809	3,171	2,126	4,981
France	1,167	2,740	505	1,015
Federal Republic of Germany	60	131	130	354
Canada	380	500	295	346
Belgium	165	324	132	239
Sweden	187	301	67	157
United Kingdom	162	227	156	144
Other	355	498	180	439
Total	4,285	7,892	3,591	7,675

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC CANNED SALMON, BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
United Kingdom	8,174	13,139	9,840	16,882
Australia	3,457	5,815	5,231	8,252
Netherlands	2,537	4,192	4,998	7,218
Canada	3,413	4,775	6,015	3,713
Belgium	1,190	1,655	1,954	2,682
Venezuela	181	290	198	341
Saudi Arabia	8	17	170	208
Other	2,315	4,148	4,107	9,944
Total	21,275	34,031	32,513	49,240

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

U.S. EXPORTS

EXPORTS OF DOMESTIC FRESH OR FROZEN KING CRAB,
BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	7,499	17,595	27,567	90,135
Netherlands	401	2,218	611	4,892
Canada	951	2,485	994	3,317
Belgium	495	2,873	249	2,192
Australia	210	1,090	225	1,610
Federal Republic of Germany	42	152	82	395
Other	584	2,571	538	2,883
Total	10,182	28,984	30,266	105,424

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC CANNED SQUID,
BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Greece	2,154	668	6,170	2,340
Philippines	2,528	664	1,255	426
Japan	-	-	1,285	148
Australia	68	31	482	127
Canada	34	4	378	86
United Kingdom	-	-	132	56
Other	261	44	864	166
Total	5,045	1,411	10,566	3,349

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS OF DOMESTIC FISH MEAL,
BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Short tons	Thousand dollars	Short tons	Thousand dollars
Federal Republic of Germany	22,832	7,996	29,803	9,962
Egypt	6,120	2,507	13,903	5,194
Iran	220	106	2,122	889
Saudi Arabia	154	66	1,297	535
Dominican Republic	45	12	1,160	348
Japan	94	36	232	72
Other	6,638	1,861	2,183	468
Total	36,103	12,584	50,700	17,468

Source:--U.S. Department of Commerce, Bureau of the Census.

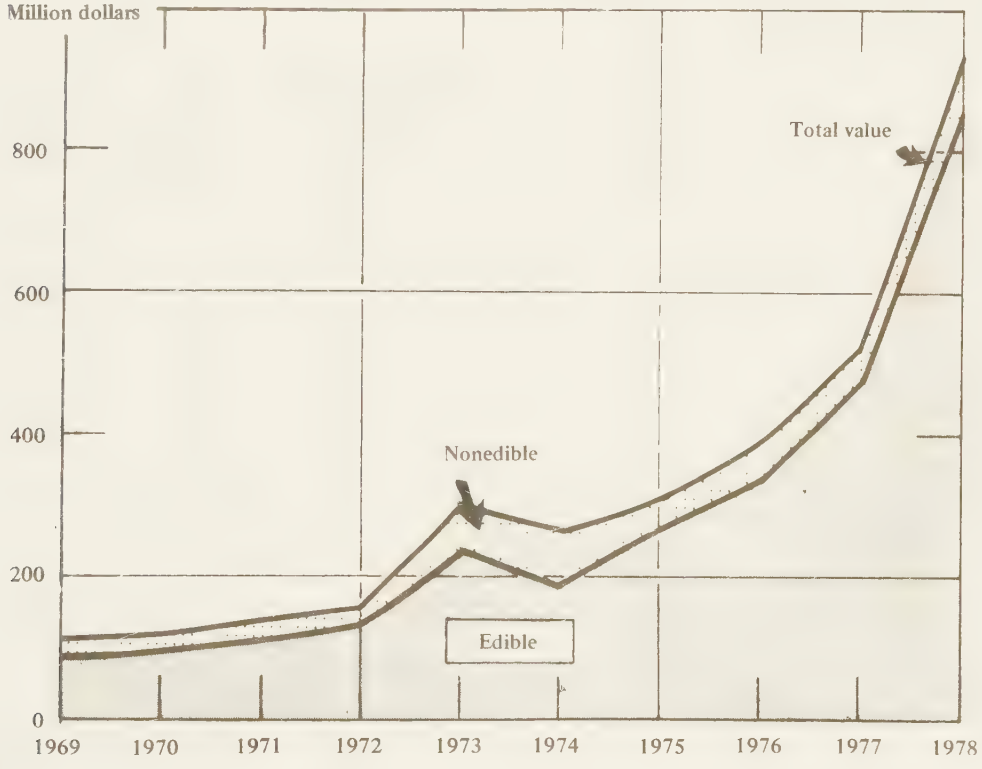
U.S. EXPORTS

EXPORTS OF DOMESTIC FISH AND FISH LIVER OILS,
BY COUNTRY OF DESTINATION, 1977 AND 1978

Country	1977		1978	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Netherlands	52,554	10,379	81,968	15,101
United Kingdom	7,943	1,597	50,600	9,840
Federal Republic of Germany	13,968	2,632	45,042	8,523
Colombia	5,588	1,071	18,302	3,411
Sweden	2,200	440	8,745	1,665
Spain	-	-	6,307	1,254
Other	8,380	1,988	11,048	2,546
Total	90,633	18,107	222,012	42,340

Note:--Does not include whale and sperm oil.
Source:--U.S. Department of Commerce, Bureau of the Census.

VALUE OF U.S. EXPORTS OF DOMESTIC FISHERY PRODUCTS, 1969-78



SUPPLY OF FISHERY PRODUCTS

U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1969-78
(Quantity on round-weight basis)

Year	Domestic commercial landings		Imports (1)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1969	4,337	36.6	7,510	63.4	11,847
1970	4,917	42.9	6,557	57.1	11,474
1971	5,018	42.5	6,786	57.5	11,804
1972	4,806	34.7	9,043	65.3	13,849
1973	4,858	46.8	5,520	53.2	10,378
1974	4,967	50.3	4,908	49.7	9,875
1975	4,877	48.0	5,287	52.0	10,164
1976 (2)	5,350	46.3	6,205	53.7	11,555
1977 (2)	5,198	49.1	5,381	50.9	10,579
1978 (2)	*6,028	52.4	5,481	47.6	11,509

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary.

Note:--The weights of U.S. landings and imports represent the round (live) weight of all items except univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.), which are shown in weight of meats, excluding the shell. *Record. Record imports were 13,221 million lb in 1968; record total, 17,381 million lb in 1968.

U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1969-78
(Quantity on round-weight basis)

Year	Domestic commercial landings		Imports (1)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1969	2,321	40.9	3,353	59.1	5,674
1970	2,537	40.8	3,676	59.2	6,213
1971	2,441	40.5	3,582	59.5	6,023
1972	2,435	35.3	4,454	64.7	6,889
1973	2,398	33.7	4,709	66.3	7,107
1974	2,496	37.6	4,142	62.4	6,638
1975	2,465	38.6	3,929	61.4	6,394
1976 (2)	2,760	37.4	4,629	62.6	7,389
1977 (2)	2,900	39.1	4,514	60.9	7,414
1978 (2)	3,177	60.9	*4,958	39.1	*8,135

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary. *Record. Record U.S. landings were 3,307 million lb in 1950.

U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1969-78
(Quantity on round-weight basis)

Year	Domestic commercial landings		Imports		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1969	2,016	32.7	4,157	67.3	6,173
1970	2,380	45.2	2,881	54.8	5,261
1971	2,577	44.6	3,204	55.4	5,781
1972	2,371	34.1	4,589	65.9	6,960
1973	2,460	75.2	811	24.8	3,271
1974	2,471	76.3	766	23.7	3,237
1975	2,412	64.0	1,358	36.0	3,770
1976 (1)	2,590	62.2	1,576	37.8	4,166
1977 (1)	2,298	72.6	867	27.4	3,165
1978 (1)	*2,851	84.5	523	15.5	3,374

(1) Preliminary. *Record. Record imports were 9,989 million lb in 1968; record total supply, 11,802 million lb in 1968.

U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1977 AND 1978

Item	Domestic commercial landings		Imports (1)		Total	
	1977	1978	1977	1978	1977	1978
	Million pounds, round weight					
Edible fishery products:						
Finfish	1,781	2,018	3,808	4,245	5,589	6,263
Shellfish	1,119	1,159	706	713	1,825	1,872
Total	2,900	3,177	4,514	4,958	7,414	8,135
Industrial fishery products:						
Finfish	2,281	2,840	(2)867	(2)523	3,148	3,363
Shellfish	17	11	(3)	(3)	17	11
Total	2,298	2,851	(2)867	(2)523	3,165	3,374
Total:						
Finfish	4,062	4,858	4,675	4,768	8,737	9,626
Shellfish	1,136	1,170	706	713	1,842	1,883
Total	5,198	6,028	5,381	5,481	10,579	11,509

Item	Domestic commercial landings		Imports (1)		Total	
	1977	1978	1977	1978	1977	1978
	Million dollars					
Edible fishery products:						
Finfish	602	757	1,149	1,222	1,751	1,979
Shellfish	802	976	783	886	1,585	1,862
Total	1,404	1,733	1,932	2,108	3,336	3,841
Industrial fishery products:						
Finfish	104	114	(2)35	(2)18	139	132
Shellfish	7	7	(3)	(3)	7	7
Total	111	121	(2)35	(2)18	146	139
Total:						
Finfish	706	871	1,184	1,240	1,890	2,111
Shellfish	809	983	783	886	1,592	1,869
Total	1,515	1,854	1,967	2,126	3,482	3,980

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.
(2) Includes only quantity and value of fish meal and sea herring for industrial purposes.
(3) Not available.

Note:--Value of domestic commercial landings is exvessel value. Value of imports generally is export value, packed ready for shipment to the United States.

U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1969-78
(Quantity in edible weight)

Year	U.S. production		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1969	3,497	1.3	266,748	98.7	270,245
1970	3,892	1.4	272,655	98.6	276,547
1971	6,186	1.9	311,166	98.1	317,352
1972	3,508	1.0	355,459	99.0	358,967
1973	9,865	2.7	358,730	97.3	368,595
1974	4,417	1.6	266,073	98.4	270,490
1975	2,357	.7	313,479	99.3	315,836
1976	1,697	.4	378,742	99.6	380,439
1977	2,138	.6	385,138	99.4	387,276
1978	2,135	.5	*406,286	99.5	*408,421

*Record.

U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1969-78
(Quantity in edible weight)

Year	U.S. production (1)		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1969	137,613	32.9	280,414	67.1	418,027
1970	133,508	29.3	322,209	70.7	455,717
1971	128,392	31.0	285,741	69.0	414,133
1972	126,643	24.7	385,127	75.3	511,770
1973	133,359	24.1	419,663	75.9	553,022
1974	132,337	29.6	315,275	70.4	447,612
1975	128,923	25.9	367,948	74.1	496,871
1976	142,585	25.6	413,307	74.4	555,892
1977	160 388	28.7	398,110	71.3	558,498
1978	161,283	27.6	*423,618	72.4	*584,901

*Record. Record U.S. production was 205,486,000 lb in 1951. (1) Includes fillets used to produce blocks.

U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1969-78
(Quantity in edible weight)

Year	U.S. production (1)		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1969	47,269	22.8	159,980	77.2	207,249
1970	42,894	18.7	186,107	81.3	229,001
1971	43,808	20.4	171,452	79.6	215,260
1972	39,266	15.5	213,255	84.5	252,521
1973	46,974	17.6	220,096	82.4	267,070
1974	45,337	21.5	165,351	78.5	210,688
1975	36,822	15.5	200,356	84.5	237,178
1976	40,564	15.1	228,287	84.9	268,851
1977	59,931	21.6	217,423	78.4	277,354
1978	62,388	21.1	*233,099	78.9	*295,487

*Record. Record U.S. production was 148,786,000 lb in 1951. (1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, pollock, and Atlantic ocean perch.

U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1969-78

Year	Domestic commercial landings			Imports		
	Atlantic, Gulf, Pacific Coast States, and Hawaii	Puerto Rico	Total	Fresh and frozen including cooked loins and discs (1)	Canned	
					In oil	Not in oil
	Round weight				Product weight	
	Thousand pounds					
1969	324,884	96,268	421,152	414,450	158	72,958
1970	393,494	(2)84,852	478,346	464,585	153	72,109
1971	346,146	(2)128,770	474,916	506,602	1,050	58,792
1972	387,032	(2)147,668	534,700	764,784	384	56,129
1973	346,571	172,492	519,063	816,739	244	38,382
1974	392,223	165,008	557,231	838,889	233	52,513
1975	392,527	(2)*177,100	569,627	516,735	199	51,472
1976	*485,506	174,346	*659,852	641,121	288	58,605
1977	345,229	123,666	468,895	670,072	178	34,453
1978	408,878	(2)156,813	565,691	*861,803	207	51,575

(1) Includes landings in American Samoa of foreign-caught fish. (2) Includes a small quantity of fish landed in American Samoa by U.S. vessels. *Record.

U.S. SUPPLY OF CANNED TUNA, 1969-78
(Quantity in canned weight)

Year	U.S. pack from domestic commercial landings (1)		U.S. pack from imported fresh and frozen tuna (2)		Total	Imported canned		Total supply
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds		Percent	Thousand pounds
1969	181,786	38.6	216,651	45.9	398,437	73,116	15.5	471,553
1970	203,531	39.9	234,109	45.9	437,640	72,262	14.2	509,902
1971	194,468	39.0	244,273	49.0	438,741	59,842	12.0	498,583
1972	234,000	34.6	385,796	57.0	619,796	56,513	8.4	676,309
1973	224,130	33.2	411,719	61.1	635,849	38,626	5.7	674,475
1974	249,803	35.0	410,542	57.6	660,345	52,746	7.4	713,091
1975	260,785	44.9	268,618	46.2	529,403	51,671	8.9	581,074
1976	*285,049	43.4	314,142	47.7	599,191	58,893	8.9	658,084
1977	206,805	35.5	341,204	58.6	548,009	34,631	5.9	582,640
1978	258,116	34.0	*449,279	59.2	*707,395	51,782	6.8	*759,177

(1) Includes pack from landings in Puerto Rico and American Samoa by U.S. vessels. (2) Includes tuna canned in American Samoa from foreign-caught fish. *Record.

U.S. SUPPLY OF CANNED BONITO AND YELLOWTAIL, 1969-78
(Quantity in canned weight)

Year	U.S. pack		Imports				Total supply
			In oil	Not in oil	Total		
	Thousand pounds	Percent	Thousand pounds			Percent	Thousand pounds
1969	4,948	87.3	354	364	718	12.7	5,666
1970	2,815	69.6	830	402	1,232	30.4	4,047
1971	5,553	68.7	1,858	667	2,525	31.3	8,078
1972	6,633	64.0	2,638	1,094	3,732	36.0	10,365
1973	10,572	88.0	544	895	1,439	12.0	12,011
1974	7,789	95.8	282	59	341	4.2	8,130
1975	13,088	99.2	68	43	111	.8	13,199
1976	3,314	96.5	64	57	121	3.5	3,435
1977	9,494	87.3	17	1,358	1,375	12.7	10,869
1978	3,582	90.2	168	220	388	9.8	3,970

U.S. SUPPLY OF CANNED SARDINES, 1969-78
(Quantity in canned weight)

Year	U.S. pack, Maine sardines		Imports				Total supply
	Quantity	Percentage of total	Quantity			Percentage of total	
			In oil	Not in oil	Total		
	Thousand pounds	Percent	Thousand pounds			Percent	Thousand pounds
1969	24,402	35.0	27,220	18,147	45,367	65.0	69,769
1970	18,872	28.7	34,070	12,838	46,908	71.3	65,780
1971	22,249	30.8	31,034	18,985	50,019	69.2	72,268
1972	36,540	34.2	41,544	28,671	70,215	65.8	106,755
1973	23,284	25.7	36,089	31,330	67,419	74.3	90,703
1974	25,131	26.7	29,408	39,729	69,137	73.3	94,268
1975	26,008	45.5	18,513	12,593	31,106	54.5	57,114
1976	24,971	31.7	26,891	26,982	53,873	68.3	78,844
1977	23,496	32.0	25,748	24,288	50,036	68.0	73,532
1978	26,376	35.1	24,231	24,486	48,717	64.9	75,093

U.S. SUPPLY OF CANNED SALMON, 1969-78
(Quantity in canned weight)

Year	U.S. pack (1)		Imports		Total supply	Exports (2)	Total for U.S. consumption
	Quantity	Percentage of total	Quantity	Percentage of total			
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds		
1969	122,444	98.2	2,217	1.8	124,661	15,536	109,125
1970	183,466	98.7	2,441	1.3	185,907	16,811	169,096
1971	168,452	99.1	1,551	.9	170,003	18,233	151,770
1972	92,858	88.9	11,647	11.1	104,505	21,411	83,094
1973	71,772	90.1	7,859	9.9	79,631	16,965	62,666
1974	87,791	91.1	8,553	8.9	96,344	8,322	88,022
1975	78,086	96.0	3,265	4.0	81,351	22,558	58,793
1976	127,611	98.1	2,521	1.9	130,132	19,820	110,312
1977	150,823	99.6	586	.4	151,409	21,286	130,123
1978	164,239	99.8	325	.2	164,564	32,546	132,018

(1) Record pack was 430,328,000 lb in 1936. (2) Includes exports of domestic and foreign merchandise.

U.S. SUPPLY OF CLAM MEATS, 1969-78
(Meat weight)

Year	U.S. commercial landings					Imports (1)	Total for U.S. consumption
	Hard	Soft	Surf	Other	Total		
	Thousand pounds						
1969	16,154	13,481	49,575	1,535	80,745	2,911	83,656
1970	16,015	12,908	67,318	2,963	99,204	4,956	104,160
1971	16,666	12,652	52,535	2,636	84,489	3,447	87,936
1972	16,153	9,078	63,471	1,987	90,689	5,128	95,817
1973	14,505	8,627	82,370	2,038	107,540	4,254	111,794
1974	14,665	9,590	96,110	1,328	121,693	4,913	126,606
1975	14,995	9,174	86,956	2,262	113,387	2,435	115,822
1976	15,600	10,540	49,133	5,728	81,001	6,705	87,706
1977	15,433	10,683	51,036	19,008	96,160	8,423	104,583
1978	13,295	10,091	39,237	25,088	87,711	6,131	93,842

(1) Imports were converted to meat weight by using the factor 0.40 for in shell or shucked; 0.30 for canned, chowder and juice; and 0.93 for other.

U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1969-78
(Heads-off weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (2)			
				Fresh and frozen		Canned	
				Domestic	Foreign	Domestic	Foreign
	Thousand pounds						
1969	195,002	220,131	415,133	29,758	10,513	11,478	98
1970	224,272	247,130	471,402	35,105	*14,699	12,274	126
1971	238,073	215,073	453,146	35,404	10,475	16,835	-
1972	235,852	254,534	490,386	34,201	6,095	17,069	20
1973	228,643	230,780	459,423	*44,172	10,212	*20,097	106
1974	224,677	267,462	492,139	32,719	6,383	13,908	91
1975	209,151	230,963	440,114	33,132	6,586	12,570	10
1976	243,975	*270,720	514,695	27,489	9,138	15,693	*181
1977	*288,443	270,406	*558,849	30,785	8,902	18,111	121
1978	256,882	239,044	495,926	41,065	13,308	12,088	146

(1) Imports were converted to heads-off weight by using these factors: 0.63, breaded; 1.00, shell-on; 1.28, peeled raw; 2.02, canned; and 2.40 for other. (2) Exports were converted to heads-off weight by using these factors: domestic--fresh and frozen, 1.18, and canned, 2.02; foreign--fresh and frozen, 1.00, and canned, 2.52. *Record.

U.S. SUPPLY OF CANNED SHRIMP, 1969-78
(Canned weight)

Year	U.S. pack	Imports	Total	Exports	
				Domestic	Foreign
	Thousand pounds				
1969	20,729	3,583	24,312	5,682	39
1970	25,125	3,876	*29,001	6,076	50
1971	22,345	2,742	25,087	8,334	-
1972	23,795	1,123	24,918	8,450	8
1973	*25,228	3,027	28,255	*9,949	42
1974	22,121	*6,107	28,228	6,885	36
1975	12,407	1,118	13,525	6,223	4
1976	20,021	2,350	22,371	7,769	*72
1977	24,525	2,809	27,334	8,966	48
1978	15,758	2,739	18,497	5,984	58

*Record.

U.S. SUPPLY OF SCALLOP MEATS, 1969-78
(Edible weight)

Year	U.S. commercial landings				Imports	Total for U.S. consumption
	Bay	Calico	Sea	Total		
	Thousand pounds					
1969	2,114	199	9,312	11,625	14,322	25,947
1970	1,700	1,833	7,304	10,837	16,830	27,667
1971	2,315	1,574	6,337	10,226	17,389	27,615
1972	2,032	1,352	7,017	10,401	20,820	31,221
1973	1,014	558	6,400	7,972	19,833	27,805
1974	1,499	1,131	6,444	9,074	18,100	27,174
1975	1,648	1,992	10,063	13,703	19,737	33,440
1976	2,131	2,261	19,840	24,232	25,253	49,485
1977	1,703	1,111	25,012	27,826	*29,786	57,612
1978	1,371	948	30,976	*33,295	28,367	*61,662

*Record.

U.S. SUPPLY OF SPINY LOBSTERS, 1969-78
(Quantity in round weight)

Year	U.S. commercial landings		Imports (1)				Total supply
			Quantity			Percentage of total supply	
	Quantity	Percentage of total supply	Fresh and frozen	Canned	Total		
	Thousand pounds	Percent	- - - Thousand pounds - - -			Percent	Thousand pounds
1969	8,781	5.7	144,275	1,355	145,630	94.3	154,411
1970	10,345	7.9	119,756	459	120,215	92.1	130,560
1971	8,941	6.2	133,974	473	134,447	93.8	143,388
1972	*12,215	8.0	139,802	428	140,230	92.0	152,445
1973	11,432	8.5	123,219	603	123,822	91.5	135,254
1974	11,708	8.1	132,158	428	132,586	91.9	144,294
1975	7,613	5.1	142,280	504	142,784	94.9	150,397
1976	4,889	2.8	164,859	3,536	*168,395	97.2	*173,284
1977	5,483	3.5	149,156	1,517	150,673	96.5	156,156
1978	4,629	3.1	143,945	563	144,508	96.9	149,137

(1) Imports were converted to round (live) weight by using these factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50, canned. *Record.

U.S. SUPPLY OF AMERICAN LOBSTERS, 1969-78
(Quantity in round weight)

Year	U.S. commercial landings		Imports (1)				Total supply
			Quantity			Percentage of total supply	
	Quantity	Percentage of total supply	Fresh and frozen	Canned	Total		
	Thousand pounds	Percent	- - - Thousand pounds - - -			Percent	Thousand pounds
1969	33,787	51.7	20,134	11,461	31,595	48.3	65,382
1970	34,152	53.1	19,124	11,048	30,172	46.9	64,324
1971	33,688	49.4	23,894	10,635	*34,529	50.6	*68,217
1972	32,244	52.8	18,811	10,032	28,843	47.2	61,087
1973	28,991	52.9	18,113	7,656	25,769	47.1	54,760
1974	28,543	53.3	17,586	7,392	24,978	46.7	53,521
1975	30,200	52.3	18,325	9,243	27,568	47.7	57,768
1976	31,741	52.5	19,176	9,531	28,707	47.5	60,448
1977	31,708	49.0	16,944	16,068	33,012	51.0	64,720
1978	*34,419	55.9	16,468	10,648	27,116	44.1	61,535

(1) Imports were converted to round (live) weight by using these factors: 1.00, whole; 4.50, meat; and 4.64, canned. *Record.

U.S. SUPPLY OF CANNED CRABMEAT, 1969-78
(Quantity in canned weight)

Year	U.S. pack	Percentage of total	Imports	Percentage of total	Total	Exports (1)
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds	Thousand pounds
1969	5,027	62.4	3,035	37.6	8,062	51
1970	5,097	64.8	2,765	35.2	7,862	200
1971	3,213	46.3	3,723	53.7	6,936	40
1972	2,513	49.7	2,547	50.3	5,060	21
1973	3,724	65.6	1,956	34.4	5,680	1,524
1974	4,358	64.8	2,371	35.2	6,729	707
1975	3,283	69.5	1,440	30.5	4,723	446
1976	3,555	63.4	2,054	36.6	5,609	370
1977	5,013	59.1	3,463	40.9	8,476	268
1978	4,985	55.2	4,053	44.8	9,038	462

(1) King crab only. Record production was 11,002,000 lb in 1966; record imports, 13,507,000 lb in 1939.

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1969-78
(Quantity in product weight)

Year	U.S. production (1)		Imports		Total
	Short tons	Percent	Short tons	Percent	Short tons
1969	293,510	45.0	358,431	55.0	651,941
1970	316,681	55.7	251,729	44.3	568,410
1971	348,406	55.2	283,277	44.8	631,683
1972	352,704	47.4	391,998	52.6	744,702
1973	356,235	83.8	68,651	16.2	424,886
1974	369,344	84.4	68,307	15.6	437,651
1975	354,356	75.0	118,395	25.0	472,751
1976	376,248	72.7	140,988	27.3	517,236
1977	343,456	80.7	81,901	19.3	425,357
1978	*446,216	91.0	(2)43,901	9.0	490,117

(1) Includes shellfish meal production. (2) Data do not include imports of fish solubles for 1978.
Note:--Wet weight of solubles has been converted to dry weight by reducing its poundage by one-half. *Record. Record imports in 1968, 856,172 short tons, and total supply, 1,127,225 short tons in 1968.

U.S. SUPPLY OF FISH MEAL, 1969-78
(Quantity in product weight)

Year	Domestic production (1)	Imports	Total supply	Exports (2)	Total for U.S. consumption
	Short tons				
1969	252,664	358,350	611,014	(3)	611,014
1970	269,197	251,492	520,689	4,724	515,965
1971	292,812	283,249	576,061	10,594	565,467
1972	285,506	391,955	677,461	18,869	658,592
1973	287,517	68,496	356,013	45,745	310,268
1974	300,714	68,297	369,011	55,522	313,489
1975	290,431	118,371	408,802	12,475	396,327
1976	309,694	140,377	450,071	33,322	416,749
1977	282,291	81,491	363,782	37,199	326,583
1978	*362,556	43,901	406,457	54,633	351,824

(1) Includes shellfish meal. (2) Includes exports of domestic and foreign fish meal. (3) Data not available. *Record. Record total supply and total for U.S. consumption was 1,090,421 short tons in 1968.

U.S. SUPPLY OF FISH SOLUBLES, 1969-78
(Quantity in product weight)

Year	U.S. production		Imports (1)		Total
	Short tons	Percent	Short tons	Percent	Short tons
1969	81,692	99.8	161	0.2	81,853
1970	94,968	99.5	474	.5	95,442
1971	111,188	99.9	56	.1	111,244
1972	134,395	99.9	85	.1	134,480
1973	137,435	99.8	309	.2	137,744
1974	137,259	99.9	19	(2)	137,278
1975	127,850	99.9	48	(2)	127,898
1976	133,107	99.1	1,221	.9	134,328
1977	122,330	99.3	820	.7	123,150
1978	*167,319	100.0	(3)	-	167,319

(1) Includes only fish solubles and will not check with other tables that show total imports of fish solubles and cod-liver solubles for years 1969 to 1977. (2) Less than one-tenth of 1 percent. (3) Data not available. *Record. Record imports in 1959, 26,630 short tons; and total supply, 191,989 short tons.

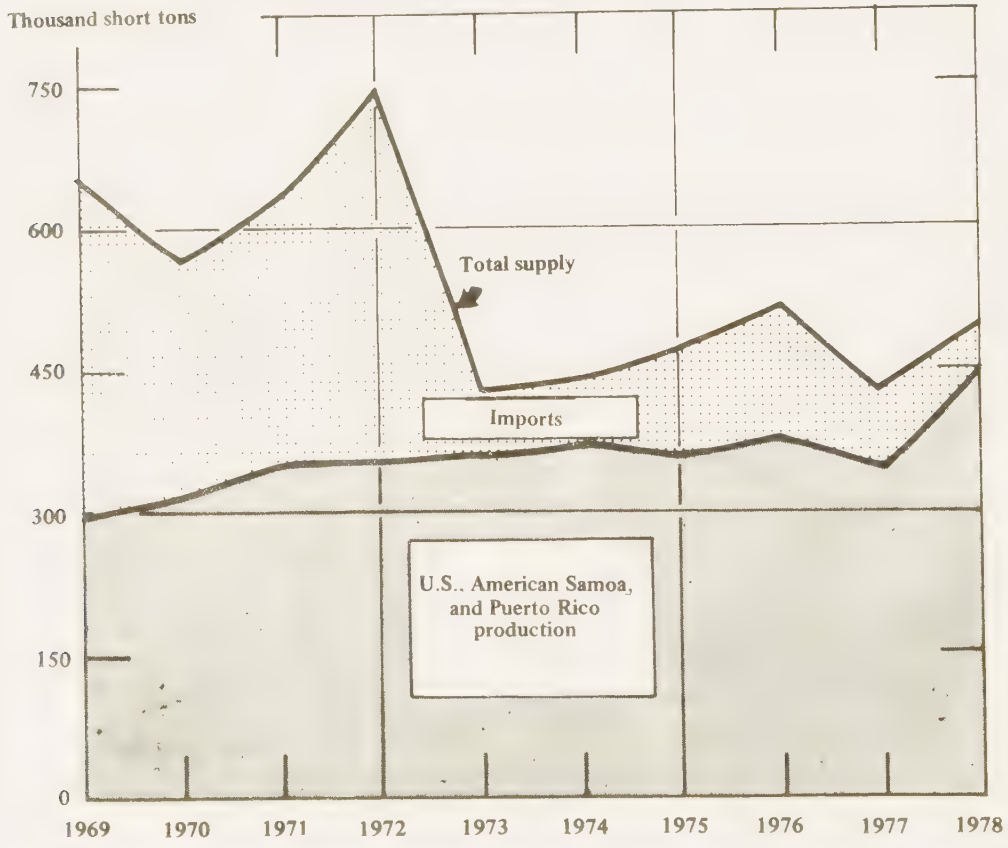
SUPPLY OF FISHERY PRODUCTS

U.S SUPPLY OF FISH OILS, 1969-78

Year	Domestic production	Imports	Total supply	Exports	Total for U.S. consumption
	Thousand pounds				
1969	168,049	4,206	172,255	196,073	(1)
1970	205,404	5,544	210,948	158,787	52,161
1971	265,032	7,512	272,544	229,898	42,646
1972	188,445	9,466	197,911	193,198	4,713
1973	224,634	6,733	231,367	247,793	(2)
1974	237,980	12,356	250,336	199,122	51,214
1975	245,653	11,283	256,936	191,843	65,093
1976	204,581	20,937	225,518	179,235	46,283
1977	133,187	13,731	146,918	90,633	56,285
1978	294,885	15,729	310,614	222,012	88,602

(1) Total for U.S. consumption was a negative (-)23,818,000 lb because of withdrawal of stocks from storage. (2) Total for U.S. consumption was a negative (-)16,426,000 lb because of withdrawal of stocks from storage.
Note:--Excludes whale and sperm oils. Does not include exports of foreign merchandise. Record U.S. production in 1936 was 299,265,000 lb.

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1969-78



PURCHASES OF FRESH, FROZEN, AND CANNED FISHERY PRODUCTS, BY DEFENSE SUBSISTENCE SUPPLY CENTERS, 1969-78

Year	Fresh and frozen		Canned	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1969	22,000	20,700	8,080	9,641
1970	18,419	16,734	8,135	17,966
1971	17,884	18,895	10,920	15,243
1972	17,605	21,806	17,932	35,101
1973	14,281	18,141	4,350	3,852
1974	12,802	14,507	5,495	6,572
1975	13,769	21,640	6,317	3,816
1976	9,875	21,817	6,039	6,429
1977	10,463	22,652	4,250	7,599
1978	12,476	25,912	5,716	8,709

Note:--Armed Forces installations generally make some local purchases not included in the above data.

Source:--U.S. Department of Defense.

PURCHASES OF PRINCIPAL FRESH AND FROZEN FISHERY PRODUCTS, BY DEFENSE SUBSISTENCE SUPPLY CENTERS, 1977 AND 1978

Product	1977	1978
	Thousand pounds	
Shrimp:		
Raw headless	159	205
Peeled and deveined	756	671
Breaded	2,882	2,945
Total	3,797	3,821
Scallops	374	537
Spiny lobster tails	234	400
Oysters:		
Eastern	323	353
Pacific	48	83
Total	371	436
Fillets:		
Cod	151	96
Flounder	664	720
Ocean perch	973	1,297
Haddock	140	157
Fish sticks	458	412
Portions:		
Haddock-cod-lingcod	1,099	1,453
Flounder-perch-pollock	1,724	2,560
Steaks:		
Halibut	251	298
Salmon	40	46

Note:--Armed Forces installations generally make some local purchases not included in the above data.

Source:--U.S. Department of Defense.

PRICES

EXVESSEL

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY MONTHS, 1978
(1967=100)

Species or group	Jan.	Feb.	Mar.	Apr.	May	June
New England finfish:						
Cod	323.7	248.7	369.5	240.5	193.6	173.6
Haddock	262.7	191.9	278.4	218.3	202.6	177.9
Yellowtail flounder	616.3	538.7	672.2	467.4	442.1	449.3
Other flounders	361.6	293.5	387.7	209.4	219.6	279.7
Ocean perch	425.4	435.6	461.1	435.6	428.0	400.0
Pollock	343.4	302.8	368.9	284.2	291.0	262.2
Whiting	451.7	205.7	271.4	265.1	275.7	405.0
New England finfish	379.4	299.5	392.2	287.3	273.6	281.4
Red snapper	313.8	333.3	347.2	369.4	374.9	388.8
Pacific halibut	477.7	477.7	477.7	477.7	477.7	495.4
Salmon:						
Chinook - troll	456.0	456.0	456.0	456.0	339.4	339.4
Chinook - nontroll	645.7	645.7	645.7	645.7	645.7	645.7
Chum	524.1	524.1	524.1	524.1	524.1	480.4
Coho - troll	337.2	337.2	337.2	337.2	337.2	337.2
Coho - nontroll	527.5	527.5	527.5	527.5	527.5	527.5
Pink	471.6	471.6	471.6	471.6	471.6	353.7
Sockeye	533.0	533.0	533.0	533.0	533.0	533.0
Salmon	491.8	491.8	491.8	491.8	480.5	459.9
Tuna:						
Albacore	307.7	307.7	307.7	307.7	307.7	322.5
Skipjack	350.7	354.3	354.3	354.3	354.3	354.3
Bluefin	321.6	321.6	321.6	321.6	321.6	325.5
Yellowfin	295.2	298.0	298.0	298.0	298.0	298.0
Tuna	314.8	317.2	317.2	317.2	317.2	320.5
Edible finfish	408.9	392.7	413.3	391.0	383.5	378.8
Shrimp	251.0	256.3	269.8	289.2	307.9	294.4
Other shellfish:						
Hard clams	335.9	300.1	271.7	203.2	219.7	219.7
Soft clams	366.3	366.9	374.2	298.1	257.0	252.7
Surf clams	450.6	412.7	413.7	544.1	535.8	596.4
Hard blue crabs	431.6	423.1	473.9	382.5	467.1	506.0
King crabs	1,349.6	1,290.6	1,196.6	1,196.6	1,196.6	1,196.6
American lobsters	326.1	354.4	380.9	338.0	248.0	250.5
Eastern oysters	173.2	187.9	165.2	165.6	200.4	214.7
Sea scallops	315.3	275.1	274.5	248.9	245.9	307.1
Other shellfish	428.1	420.9	407.0	383.2	382.7	397.2
Edible shellfish	341.3	340.2	339.8	337.1	346.0	346.8
Edible fish	373.3	365.0	374.6	362.6	363.7	361.9
Industrial	257.3	257.3	257.3	315.6	325.3	307.5
Menhaden	257.3	257.3	257.3	315.6	325.3	307.5
All fish	365.3	357.6	366.5	359.4	361.1	358.1

(Continued)

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY MONTHS, 1978 - Continued
(1967=100)

Species or group	July	Aug.	Sept.	Oct.	Nov.	Dec.
New England finfish:						
Cod	327.3	300.3	312.0	251.0	287.4	422.3
Haddock	219.9	233.9	250.4	235.6	233.9	387.1
Yellowtail flounder	587.4	504.4	713.7	679.4	480.9	546.8
Other flounders	436.2	429.7	437.0	427.5	348.6	400.7
Ocean perch	420.3	435.6	433.1	435.6	458.6	494.2
Pollock	314.6	299.5	355.5	323.2	265.7	277.5
Whiting	313.8	239.6	375.3	394.4	229.0	265.1
New England finfish	357.9	338.8	396.8	378.3	321.1	418.8
Red snapper	377.7	397.1	399.9	402.7	377.7	388.8
Pacific halibut	573.3	619.3	637.0	637.0	637.0	637.0
Salmon:						
Chinook - troll	350.0	392.4	392.4	392.4	392.4	392.4
Chinook - nontroll	645.7	553.5	553.5	553.5	553.5	553.5
Chum	480.4	480.4	480.4	480.4	480.4	480.4
Coho - troll	355.1	355.1	355.1	355.1	355.1	355.1
Coho - nontroll	527.5	549.5	549.5	549.5	549.5	549.5
Pink	353.7	353.7	353.7	353.7	353.7	353.7
Sockeye	511.7	882.7	852.9	852.9	852.9	852.9
Salmon	456.8	579.3	569.3	569.3	569.3	569.3
Tuna:						
Albacore	322.5	322.5	322.5	322.5	322.5	322.5
Skipjack	354.3	354.3	354.3	354.3	354.3	347.1
Bluefin	325.5	325.5	325.5	325.5	325.5	325.5
Yellowfin	298.0	298.0	298.0	298.0	298.0	298.0
Tuna	320.5	320.5	320.5	320.5	320.5	318.4
Edible finfish	397.5	446.2	455.6	451.7	438.6	459.5
Shrimp	319.7	326.7	351.0	349.8	368.1	372.9
Other shellfish:						
Hard clams	245.6	274.2	291.7	250.9	261.0	316.9
Soft clams	344.8	418.3	444.4	440.8	425.6	390.8
Surf clams	597.4	495.8	593.3	598.4	590.2	434.2
Hard blue crabs	407.9	309.7	250.5	243.7	226.8	248.8
King crabs	1,196.6	1,196.6	1,196.6	1,290.6	1,470.1	1,504.2
American lobsters	229.6	175.0	170.1	179.7	207.1	311.7
Eastern oysters	190.8	181.1	144.7	147.2	154.0	154.3
Sea scallops	345.4	321.4	388.8	403.4	392.3	407.8
Other shellfish	387.2	366.2	350.9	371.4	401.2	430.1
Edible shellfish	354.1	346.8	350.9	360.8	385.0	402.1
Edible fish	374.6	393.8	400.4	403.8	410.4	429.3
Industrial fish	286.4	307.5	326.1	311.5	329.3	242.7
Menhaden	286.4	307.5	326.1	311.5	329.3	242.7
All fish	368.5	387.8	395.3	397.4	404.8	416.4

Note:--Data are preliminary. Monthly prices for species representing about 70 percent of the landed value of all fish and shellfish during recent years have been combined into index groups to indicate movement of exvessel prices.

PRICES

EXVESSEL

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1973-78
(1967=100)

Species or group	1973	1974	1975	1976	1977 (1)	1978 (2)
New England finfish:						
Cod	224.5	228.6	285.2	312.5	284.6	287.5
Haddock	256.7	248.8	232.5	290.2	246.8	241.0
Yellowtail flounder	217.2	251.1	339.8	399.3	432.4	558.2
Other flounders	201.8	210.3	254.2	281.0	278.3	352.6
Ocean perch	206.6	209.3	263.0	347.1	391.5	438.6
Pollock	210.1	201.4	227.7	255.9	267.9	307.4
Whiting	146.7	166.3	193.3	180.8	213.6	307.6
New England finfish	223.0	229.7	260.2	305.7	298.9	343.8
Red snapper	209.6	213.5	237.3	275.5	330.8	372.6
Pacific halibut	295.5	286.8	332.6	463.3	494.8	552.0
Salmon:						
Chinook - troll	195.2	217.0	210.6	312.7	404.4	401.2
Chinook - nontroll	300.7	295.2	203.0	369.0	564.2	607.3
Chum	471.6	553.2	436.8	564.2	664.6	498.6
Coho - troll	206.5	227.6	214.9	287.1	330.2	346.2
Coho - nontroll	326.4	348.7	292.3	370.0	478.0	536.7
Pink	347.2	432.3	353.7	275.1	378.6	402.8
Sockeye	329.4	447.8	447.8	452.4	490.4	667.0
Salmon	307.2	373.2	336.6	380.9	459.0	518.4
Tuna:						
Albacore	196.2	218.1	197.8	246.0	286.0	316.3
Skipjack	204.0	241.2	220.1	246.6	316.8	353.4
Bluefin	183.6	206.9	203.2	225.6	285.7	323.9
Yellowfin	171.1	202.2	189.5	209.5	268.6	297.8
Tuna	186.4	216.9	200.5	228.6	286.8	318.8
Edible finfish	249.5	287.0	276.3	319.7	370.7	418.1
Shrimp	195.6	172.5	218.5	298.0	301.5	313.1
Other shellfish:						
Hard clams	156.4	173.8	171.6	204.5	229.1	265.9
Soft clams	217.3	212.3	236.4	310.2	342.7	365.0
Surf clams	129.4	136.8	136.7	482.6	517.7	521.9
Hard blue crabs	231.0	215.5	291.4	383.9	440.5	364.3
King crabs	550.6	573.4	340.2	659.6	923.1	1,267.0
American lobsters	173.3	182.6	206.0	216.3	245.1	264.3
Eastern oysters	96.8	109.0	119.8	152.5	173.6	173.3
Sea scallops	231.6	200.5	239.4	247.2	216.0	327.2
Other shellfish	205.4	213.0	199.3	281.6	336.6	393.8
Edible shellfish	200.6	193.2	208.7	289.7	319.4	354.2
Edible fish	223.8	237.5	240.7	303.9	343.7	384.4
Industrial fish	276.4	255.7	224.4	234.8	292.6	293.6
Menhaden	276.4	255.7	224.4	234.8	292.6	293.6
All fish	227.4	238.7	239.6	299.1	340.1	378.2

(1) Revised.
(2) Preliminary.
Note:--Simple averages of the 12 monthly indexes. Upward or downward changes in this index will not necessarily agree with changes in unit values shown in landings tables.

WHOLESALE

WHOLESALE PRICE INDEXES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1978

Group	Jan.	Feb.	Mar.	Apr.	May	June
	- - - - - - - - - Index (1967=100) - - - - - - - - -					
All fish and shellfish (fresh, frozen, and canned).	293.3	288.5	261.3	296.0	297.1	295.7
Fresh and frozen fishery products .	312.5	306.0	285.0	316.6	317.5	315.3
Drawn, dressed, or whole finfish. .	385.2	375.1	295.4	389.9	382.1	370.7
Processed, fresh (fish and shellfish).	288.7	274.8	295.6	284.3	283.9	284.8
Processed, frozen (fish and shellfish).	279.7	277.8	278.8	286.3	293.1	295.5
Canned fishery products	263.5	263.5	209.8	260.7	262.4	264.0

Group	July	Aug.	Sept.	Oct.	Nov.	Dec.
	- - - - - - - - Index (1967=100) - - - - - - - -					
All fish and shellfish (fresh, frozen, and canned).	313.4	316.6	329.9	337.7	343.7	352.1
Fresh and frozen fishery products .	338.5	342.1	359.6	370.0	377.7	388.8
Drawn, dressed, or whole finfish. .	433.8	429.8	440.6	472.3	460.9	482.5
Processed, fresh (fish and shellfish).	293.9	299.6	341.3	333.7	339.55	367.1
Processed, frozen (fish and shellfish).	299.1	306.8	320.5	323.8	344.2	343.4
Canned fishery products	264.0	265.7	265.7	265.2	265.2	265.2

Source:--U.S. Department of Labor, Bureau of Labor Statistics.

PRICES

WHOLESALE

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1978

Group, subgroup, and item specification	Point of pricing	Unit	Jan.	Feb.	Mar.	Apr.	May	June
			Dollars					
FRESH AND FROZEN FISHERY PRODUCTS:								
Haddock, large, offshore, drawn, fresh	Boston	lb	0.75	0.40	0.58	0.60	0.65	0.35
Halibut, west., 20-80 lb, dressed, fresh and frozen	New York	lb	1.80	1.80	1.50	1.85	1.90	1.90
Salmon, king, large and medium, dressed, fresh and frozen	New York	lb	3.40	3.40	2.40	3.40	3.40	3.40
Whitefish, Lake Superior, drawn, fresh	Chicago	lb	1.40	1.60	1.25	1.78	.98	.98
Yellow pike, Lakes Michigan and Huron, round fresh	New York	lb	1.45	1.45	1.25	1.85	1.45	1.40
PROCESSED, FRESH (fish and shellfish):								
Fillets, haddock, small, skin on, 20-lb tins	Boston	lb	1.65	1.25	1.60	1.60	1.30	1.30
Shrimp, large (26-30 count), headless, fresh	New York	lb	3.43	3.38	3.70	3.40	3.50	3.50
Oysters, shucked, standards	Norfolk	gal	16.50	16.25	12.00	15.75	16.25	16.75
PROCESSED, FROZEN (fish and shellfish):								
Fillets: Cod, skinless, Canadian, 1-lb package	Boston	lb	1.00	1.00	.99	1.00	.99	-
Flounder, skinless, 1-lb package	Boston	lb	1.21	1.21	1.05	1.26	1.26	1.26
Ocean perch, large skin on, 1-lb package	Boston	lb	.95	.97	.74	.99	1.00	1.01
Shrimp, large (26-30 count), brown, 5-lb package	Chicago	lb	3.18	3.10	3.70	3.30	3.43	3.48
Shrimp, raw, breaded, (15-20 count), 4-lb package	Selected areas	lb	2.66	2.68	2.82	2.72	2.80	2.80
Fish blocks, cod, raw, 13-1/2 - 16-lb carton	Selected areas	lb	1.01	1.01	.66	1.01	1.01	1.01
Fish sticks, cod, precooked, breaded, 1/2-1-lb package	Selected areas	lb	1.39	1.39	-	1.14	-	-
Fish portions, cod, raw, breaded, 6-lb package	Selected areas	lb	1.15	1.15	.77	1.15	1.15	1.16
CANNED FISHERY PRODUCTS:								
Salmon, pink, No. 1 tall, (16-oz) 48 cans/case	Seattle	case	67.00	67.00	69.00	66.00	66.00	66.00
Tuna, light meat, chunk, No. 1/2 (6-1/2-oz) 48 cans/case	Los Angeles	case	31.75	31.75	23.98	31.25	31.25	31.50
Sardines, Maine, keyless, oil, 1/4 drawn (3-3/4-oz) 100 cans/case	New York	case	27.10	27.10	21.60	28.10	30.10	30.10

(Continued)

WHOLESALE

AVERAGE WHOLESALE PRICES FOR EDIBLE FISH AND SHELLFISH, BY MONTHS, 1978 - Continued

Group, subgroup, and item specification	Point of pricing	Unit	July	Aug.	Sept.	Oct.	Nov.	Dec.
			- - - - - - - - Dollars - - - - - - - -					
FRESH AND FROZEN FISHERY PRODUCTS:								
Haddock, large, offshore, drawn, fresh.	Boston	lb	0.65	0.47	0.66	0.70	0.40	0.75
Halibut, western, 20-80 lb, dressed, fresh or frozen	New York	lb	2.23	2.24	2.24	2.60	2.60	2.60
Salmon, king, large and medium, dressed, fresh or frozen	New York	lb	3.85	3.85	3.85	4.00	4.00	4.00
Whitefish, Lake Superior, drawn, fresh.	Chicago	lb	1.03	1.13	1.38	1.03	1.01	1.53
Yellow pike, Lakes Michigan and Huron, round, fresh.	New York	lb	1.40	1.45	1.45	1.45	1.55	1.65
PROCESSED, FRESH (fish and shellfish):								
Fillets, haddock, small, skin on, 20-lb tins	Boston	lb	1.65	1.25	1.90	1.95	1.45	2.08
Shrimp, large (26-30 count), headless, fresh.	New York	lb	3.50	3.75	4.15	4.00	4.30	4.50
Oysters, shucked, standards . . .	Norfolk	gal	16.75	17.00	17.00	17.25	17.25	16.75
PROCESSED, FROZEN (fish and shellfish):								
Fillets: Cod, skinless, 1-lb package	Boston	lb	.99	.99	1.00	.99	.99	.99
Flounder, skinless, 1-lb package	Boston	lb	1.31	1.31	1.31	1.35	1.34	1.34
Ocean perch, large, skin on, 1-lb package.	Boston	lb	1.01	1.01	1.01	1.01	1.01	1.01
Shrimp, large (26-30 count), brown, 5-lb package.	Chicago	lb	3.55	3.68	3.98	3.85	4.32	4.30
Shrimp, raw, breaded (15-20 count), 4-lb package	Selected areas	lb	2.81	2.89	3.00	3.21	3.36	3.36
Fish blocks, cod, raw, 13-1/2 - 16-lb carton	Selected areas	lb	1.01	1.02	1.02	1.01	1.01	1.00
Fish sticks, cod, precooked, breaded, 1/2 - 1-lb package. . .	Selected areas	lb	-	1.21	1.21	1.21	1.21	1.21
Fish portions, cod, raw, breaded, 6-lb package	Selected areas	lb	1.16	1.17	1.17	1.17	1.17	1.17
CANNED FISHERY PRODUCTS:								
Salmon, pink, No. 1 tall (16-oz) 48 cans/case	Seattle	case	66.00	66.00	66.00	62.00	62.00	62.00
Tuna, light meat, chunk, No. 1/2 (6-1/2-oz) 48 cans/case. . . .	Los Angeles	case	31.50	31.50	31.50	31.75	31.75	31.75
Sardines, Maine, keyless, oil, 1/4 drawn (3-3/4-oz) 100 cans/case	New York	case	30.10	32.10	32.10	32.10	32.10	32.10

Note:--These are average prices for one day (Monday, Tuesday, or Wednesday) during the week in which the 13th of the month occurs. These prices are published as indicators of movement and not necessarily absolute level. Fishery Market News Reports should be referred to for actual prices. (See page 96 for information on these reports, and how they can be obtained.)

Source:--U.S. Department of Labor, Bureau of Labor Statistics.

PRICES

RETAIL

The Bureau of Labor Statistics, U.S. Department of Labor, collects estimated retail prices of fishery products for use in the food component of the Consumer Price Index (CPI).

The CPI is based on prices from a sample of 39 standard metropolitan statistical areas and 17 small cities collected to represent all urban areas of the United States, ranging in size from cities with a population of 2,500 to New York City.

Agents collect monthly food prices from chain and independent retail food stores that voluntarily report their selling prices. Prices are those in effect on the day of the agent's visit and include any sale or weekend special prices which are offered on that day.

The Bureau's agents use a description defining the quality or grade and size range for each food item for which prices are collected. All prices are converted to a standard unit, and population weights are used in obtaining U.S. average prices for all areas combined.

RETAIL PRICES OF FISHERY PRODUCTS, BY MONTHS, 1977 AND 1978

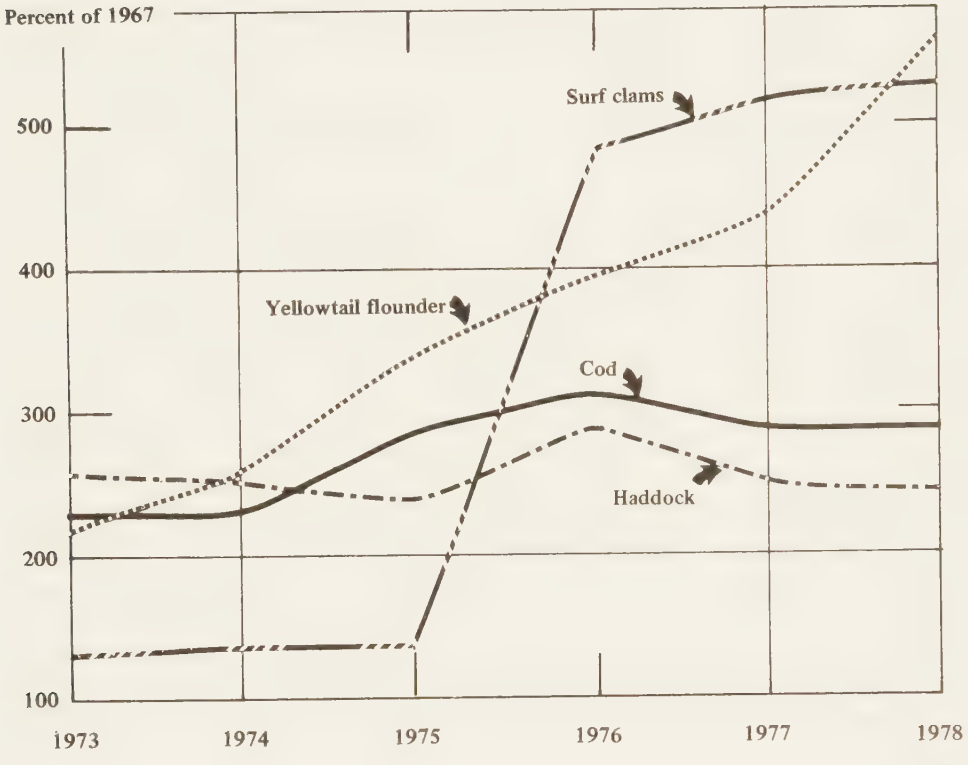
Item	Year	Jan.	Feb.	Mar.	Apr.	May	June
CONSUMER PRICE INDEX FOR FISH (1967=100)	1977	258.0	241.1	241.5	244.0	248.8	250.8
	1978	265.1	264.9	265.4	271.8	270.3	270.9
		Cents per unit					
RETAIL PRICES, U.S. AVERAGES:							
Shrimp, frozen, 10-oz (41 cities)	1977	215.4	219.5	218.6	218.4	227.4	228.1
	1978	219.4	219.6	218.7	222.3	221.4	222.7
Ocean perch, fillets, frozen, lb (38 cities)	1977	160.8	160.8	163.5	166.6	167.8	168.4
	1978	175.1	177.2	177.3	181.1	183.6	184.4
Haddock, fillets, frozen, lb (33 cities)	1977	171.9	175.5	177.3	181.1	183.6	184.4
	1978	197.6	198.7	200.4	203.3	204.1	203.9
Tuna, 6-1/2-oz can (44 cities)	1977	66.6	68.3	67.5	68.6	70.2	71.8
	1978	78.9	78.2	78.5	78.1	79.2	80.0
Sardines, 4-oz can (43 cities)	1977	54.0	53.7	54.1	54.8	55.1	55.9
	1978	59.2	59.7	59.5	59.1	60.0	60.3

Item	Year	July	Aug.	Sept.	Oct.	Nov.	Dec.
CONSUMER PRICE INDEX FOR FISH (1967=100)	1977	254.3	256.7	258.8	260.3	262.4	262.6
	1978	273.3	273.9	278.7	279.6	282.5	283.5
		Cents per unit					
RETAIL PRICES, U.S. AVERAGES:							
Shrimp, frozen, 10-oz (41 cities)	1977	230.3	229.5	227.7	226.8	228.7	225.8
	1978	(1)	(1)	(1)	(1)	(1)	(1)
Ocean perch, fillets, frozen, lb (38 cities)	1977	168.4	169.4	170.9	172.0	173.6	173.5
	1978	(1)	(1)	(1)	(1)	(1)	(1)
Haddock, fillets, frozen, lb (33 cities)	1977	185.5	187.7	191.7	192.5	196.0	196.9
	1978	(1)	(1)	(1)	(1)	(1)	(1)
Tuna, 6-1/2 oz can (44 cities)	1977	74.0	75.0	74.9	76.1	76.3	77.7
	1978	(1)	(1)	(1)	(1)	(1)	(1)
Sardines, 4-oz can (43 cities)	1977	56.8	57.3	57.7	58.1	58.2	58.7
	1978	(1)	(1)	(1)	(1)	(1)	(1)

(1) Series was discontinued by the Bureau of Labor Statistics after June 1978.

Source:--U.S. Department of Labor, Bureau of Labor Statistics, except as noted.

INDEX OF EXVESSEL PRICES OF SELECTED SPECIES UNDER FISHERY MANAGEMENT PLANS, 1973-78
(1967=100)



VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR EDIBLE FISHERY PRODUCTS IN THE UNITED STATES, 1977 AND 1978

Value	Domestic		Imports (1)		Total margin	Value-added rate (2)	Value added (3) (contribution to the economy as GNP)	
	Sales	Margin	Sales	Margin			Total	Percentage of total
	Million dollars					Percent	Million dollars	Percent
1977:								
Domestic landings	1,515	-	-	-	-	-	-	-
Industrial fish (4)	111	-	-	-	-	-	-	-
Edible fish (harvesting bill)	1,404	-	-	-	1,404	67.66	950	17.09
Exports (unprocessed) (5)	107	-	-	-	-	-	-	-
Total domestic sales	1,297	(1,297)	-	-	-	-	-	-
Imports	-	-	2,078	(2,078)	-	-	-	-
To be processed	-	-	567	-	-	-	-	-
To trade dealers	-	-	1,511	-	-	-	-	-
Processing level (6)	2,781	1,484	-	353	1,837	62.23	1,143	20.57
Exports (processed) (7)	319	-	-	-	-	-	-	-
Domestic sales	2,462	-	920	-	-	-	-	-
Wholesale level (8)	2,971	509	2,841	409	918	62.85	577	10.38
Channels to consumers:								
Retail stores (9)	1,410	329	1,815	424	753	80.21	604	10.87
Eating places (10)	3,782	2,041	2,776	1,498	3,539	61.49	2,176	39.15
Institutions (11)	245	96	281	110	206	52.50	108	1.94
Consumer expenditures: (12)								
Sales through three channels	5,437	-	4,872	-	-	-	-	-
Landings (or imports) plus margins at five levels minus exports	-	5,437	-	4,872	-	-	-	-
Fisherman's share of a consumer's dollar for fish	-	(23.9%)	-	-	-	-	-	-
Total consumer expenditures	(52.7%)	10,309		(47.3%)	-	-	-	-
Total value added (contribution to the economy as GNP)	-	-	-	-	-	-	5,558	100.00
1978:								
Domestic landings	1,854	-	-	-	-	-	-	-
Industrial fish (4)	121	-	-	-	-	-	-	-
Edible fish (harvesting bill)	1,733	-	-	-	1,733	68.40	1,185	18.58
Exports (unprocessed) (5)	221	-	-	-	-	-	-	-
Total domestic sales	1,512	(1,512)	-	-	-	-	-	-
Imports	-	-	2,275	(2,275)	-	-	-	-
To be processed	-	-	677	-	-	-	-	-
To trade dealers	-	-	1,598	-	-	-	-	-
Processing level (6)	3,215	1,703	-	440	2,143	62.70	1,344	21.07
Exports (processed) (7)	514	-	-	-	-	-	-	-
Domestic sales	2,701	-	1,116	-	-	-	-	-
Wholesale level (8)	3,263	561	3,170	455	1,016	63.65	647	10.14
Channels to consumers:								
Retail stores (9)	1,595	356	2,040	455	811	81.10	658	10.32
Eating places (10)	4,129	2,269	3,096	1,701	3,970	61.00	2,422	37.98
Institutions (11)	270	107	315	125	232	52.40	122	1.91
Consumer expenditures: (12)								
Sales through three channels	5,994	-	5,451	-	-	-	-	-
Landings (or imports) plus margins at five levels minus exports	-	5,994	-	5,451	-	-	-	-
Fisherman's share of a consumer's dollar for fish	-	(25.2%)	-	-	-	-	-	-
Total consumer expenditures	(52.4%)	11,445		(47.6%)	-	-	-	-
Total value added (contribution to the economy as GNP)	-	-	-	-	-	-	6,378	100.00

See footnotes on next page.

(Continued)

VALUE ADDED, MARGINS, AND CONSUMER EXPENDITURES FOR EDIBLE FISHERY PRODUCTS IN THE UNITED STATES, 1977 AND 1978 - Continued

FOOTNOTES

(1) For imported fishery products, the margin and sales values at different levels are calculated in the same manner as they are done for the domestic production column, except that the markup rate at the processor level is 0.6232 in 1977 and 0.6495 in 1978; at the wholesale level the markup rate is 0.1681 in 1977 and 0.1678 in 1978. The distribution rate is 49 percent in 1977 and 50 percent in 1978 at retail stores; 45 percent in 1977 and 44 percent in 1978 at eating places; and 6 percent at institutions in 1977 and 1978.

(2) Value-added rate at each level is the weighted average of all fishery products, expressed as a percentage of its corresponding margin.

(3) Multiply each item under the total margin column by its corresponding value under the value-added rate column to get the actual value added as contribution to the economy from all production and distribution levels of the U.S. fishing industry in the food fish sector.

(4) Value of landings of fish for industrial purposes is deducted.

(5) Exports of unprocessed fish are deducted from the value of the landings after being converted to an equivalent value for domestic landings.

(6) Processor's purchase value (or domestic sales at the harvesting level) times the processor's markup rate (weighted average for all fishery products is 1.1447 in 1977 and 1.1262 in 1978) equals the margin at the processor's level.

(7) Exports of processed products are deducted at their export value from this level.

(8) Wholesale purchase value (processors domestic sales) times the weighted average of markup rates (0.2068 for 1977 and 0.2080 for 1978).

(9) In 1977, 36.4 percent of wholesale sales value is distributed to retailers and 38.0 percent in 1978. This value times the weighted average of markup rates (0.3043 in 1977 and 0.2870 in 1978) at the retail level equals the margin at retail.

(10) In 1977, 58.6 percent of wholesale sales value is distributed to eating places and 57.0 percent in 1978. At a markup rate of 1.172 for 1977 and 1.220 for 1978, the margin and sales values at this level are obtained.

(11) A wholesale sales value of 5.0 percent is distributed to institutions with a markup rate of 0.6472 in 1977 and 0.6550 in 1978; the margin and sales value at this level are then calculated.

(12) Consumer expenditures are the total sales value at retail stores, eating places, and institutions. This total is also the sum of margins of five marketing levels and the landings value after export value is deducted.

Note:--The procedure for calculating the data in this table is based on two comprehensive reports: Cost Analyses of U.S. Fish Price Margins, 1972-1977, at Different Production and Distribution Levels and Marketing Bill of U.S. Fish-Food Products, both prepared by Erwin S. Penn (202-634-7111) of the Economic Analysis Group, Office of Policy and Planning, Fx53.

U.S. PER CAPITA USE

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round-weight equivalent basis, without considering beginning or ending stocks, defense purchases, or exports (see p. 54).

Per capita use figures are not comparable with per capita consumption data (see p. 75). Per capita consumption figures represent edible (for human use) meat-weight consumption rather than round-weight consumption. In addition, per capita consumption includes allowances for beginning and ending stocks, defense purchases, and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1950-78

Year	Total population including armed forces overseas July 1	Total U.S. supply (1)	Per capita use		
			Commercial landings	Imports	Total
	Million persons	Million pounds	Pounds		
1950.	152.3	6,547	32.2	10.8	43.0
1951.	154.9	6,757	28.6	15.0	43.6
1952.	157.6	7,636	28.1	20.4	48.5
1953.	160.2	7,015	28.0	15.8	43.8
1954.	163.0	7,593	29.2	17.4	46.6
1955.	165.9	7,121	29.0	13.9	42.9
1956.	168.9	7,569	31.2	13.6	44.8
1957.	172.0	7,164	27.9	13.8	41.7
1958.	174.9	7,526	27.1	15.9	43.0
1959.	177.8	8,460	28.8	18.8	47.6
1960.	180.7	8,223	27.3	18.2	45.5
1961.	183.7	9,570	28.2	23.9	52.1
1962.	186.5	10,408	28.7	27.1	55.8
1963.	189.2	11,434	25.6	34.8	60.4
1964.	191.9	12,031	23.7	39.0	62.7
1965.	194.3	10,535	24.6	29.6	54.2
1966.	196.6	12,469	22.2	41.2	63.4
1967.	198.7	13,991	20.4	50.0	70.4
1968.	200.7	17,381	20.7	65.9	86.6
1969.	202.7	11,847	21.4	37.0	58.4
1970.	204.9	11,474	24.0	32.0	56.0
1971.	207.1	11,804	24.2	32.8	57.0
1972.	208.8	13,849	23.0	43.3	66.3
1973.	210.4	10,378	23.1	26.2	49.3
1974.	211.9	9,875	23.4	23.2	46.6
1975.	213.6	10,164	22.8	24.8	47.6
1976 (2). . .	215.1	11,555	24.9	28.8	53.7
1977 (2). . .	216.8	10,579	24.0	24.8	48.8
1978 (2). . .	218.5	11,509	27.6	25.1	52.7

(1) Data include U.S. commercial landings and imports of both edible and nonedible (industrial) fishery products on a round-weight basis. "Total supply" is not adjusted for beginning and ending stocks, defense purchases, or exports.
(2) Preliminary.

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories, imports, exports, and military purchases, divided by the civilian population of the United States as of July 1 of each year.

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-78

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	Million persons	Pounds, edible meat			
1909 (5)	90.5	4.3	2.7	*4.0	11.0
1910	92.4	4.5	2.8	3.9	11.2
1911	93.9	4.8	2.8	3.7	11.3
1912	95.3	5.0	2.9	3.4	11.3
1913	97.2	5.3	2.9	3.3	11.5
1914	99.1	5.6	3.0	3.1	11.7
1915	100.5	5.8	2.4	3.0	11.2
1916	102.0	6.0	2.2	2.8	11.0
1917	103.3	6.2	2.0	2.7	10.9
1918	103.2	6.4	2.0	2.5	10.9
1919	104.5	6.4	2.8	2.4	11.6
1920	106.5	6.3	3.2	2.3	11.8
1921	108.5	6.2	2.2	2.1	10.5
1922	110.0	6.1	3.2	2.0	11.3
1923	111.9	6.0	2.9	1.8	10.7
1924	114.1	6.1	3.2	1.7	11.0
1925	115.8	6.3	3.2	1.6	11.1
1926	117.4	6.6	3.4	1.4	11.4
1927	119.0	7.0	3.9	1.3	12.2
1928	120.5	7.1	3.9	1.1	12.1
1929	121.8	6.9	3.9	1.1	11.9
1930	122.9	5.8	3.4	1.0	10.2
1931	123.9	4.9	3.2	.7	8.8
1932	124.7	4.3	3.4	.7	8.4
1933	125.4	4.2	3.9	.6	8.7
1934	126.2	4.3	4.2	.7	9.2
1935	127.1	5.1	4.7	.7	10.5
1936	127.9	5.2	*5.8	.7	11.7
1937	128.6	5.6	5.3	.9	11.8
1938	129.6	5.2	4.8	.8	10.8
1939	130.7	5.3	4.7	.7	10.7
1940	132.1	5.7	4.6	.7	11.0
1941	132.1	6.3	4.2	.7	11.2
1942	131.4	5.2	2.9	.6	8.7
1943	128.0	5.5	1.8	.6	7.9
1944	127.2	5.5	2.6	.6	8.7
1945	128.1	6.6	2.6	.7	9.9
1946	138.9	5.9	4.2	.7	10.8
1947	143.1	5.8	3.8	.7	10.3
1948	145.7	6.0	4.4	.7	11.1
1949	148.2	5.8	4.5	.6	10.9
1950	150.8	6.3	4.9	.6	11.8
1951	151.6	6.3	4.3	.6	11.2
1952	153.9	6.2	4.3	.7	11.2
1953	156.6	6.4	4.3	.7	11.4
1954	159.7	6.2	4.3	.7	11.2
1955	163.0	5.9	3.9	.7	10.5
1956	166.1	5.7	4.0	.7	10.4
1957	169.1	5.5	4.0	.7	10.2
1958	172.2	5.7	4.3	.6	10.6
1959	175.3	5.9	4.4	.6	10.9

See footnotes at end of table.

(Continued)

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1909-78 - Continued

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	Million persons	Pounds, edible meat			
1960	178.1	5.7	4.0	0.6	10.3
1961	181.1	5.9	4.3	.5	10.7
1962	183.7	5.8	4.3	.5	10.6
1963	186.5	5.8	4.4	.5	10.7
1964	189.1	5.9	4.1	.5	10.5
1965	191.6	6.0	4.3	.5	10.8
1966	193.4	6.1	4.3	.5	10.9
1967	195.3	5.8	4.3	.5	10.6
1968	197.1	6.2	4.3	.5	11.0
1969	199.1	6.6	4.2	.4	11.2
1970	201.7	6.9	4.5	.4	11.8
1971	204.3	6.7	4.3	.5	11.5
1972	206.5	7.2	4.9	.4	12.5
1973	208.1	7.5	5.0	.4	12.9
1974	209.7	7.0	4.8	.4	12.2
1975	211.4	7.6	4.3	.4	12.3
1976 (6)	213.0	*8.2	4.3	.5	13.0
1977 (6)	214.7	7.8	4.6	.4	12.8
1978 (6)	216.4	7.9	5.0	.5	*13.4

(1) Resident population for 1909 to 1929 and civilian resident population for 1930 to date.
(2) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish.
(3) Canned fish consumption for 1910 to 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.
(4) Cured fish consumption for 1910 to 1928 is estimated.
(5) Data for 1909 estimate based on the 1908 census and foreign trade data.
(6) Preliminary.
*Record.
Note:--These consumption figures refer only to consumption of fish and shellfish entering commercial channels, and they do not include data on consumption of recreationally caught fish and shellfish, which, since 1970, is estimated to be between 3 and 4 pounds (edible meat) per person annually.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1960-78

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
			Pounds			
1960. . . .	0.7	0.4	2.0	0.4	0.5	4.0
1961. . . .	.8	.5	2.1	.4	.5	4.3
1962. . . .	.9	.3	2.1	.4	.6	4.3
1963. . . .	.9	.4	2.0	.5	.6	4.4
1964. . . .	.7	.3	2.0	.5	.6	4.1
1965. . . .	.9	.3	2.3	.5	.3	4.3
1966. . . .	.8	.4	2.3	.4	.4	4.3
1967. . . .	.7	.4	2.4	.5	.3	4.3
1968. . . .	.7	.4	2.4	.5	.3	4.3
1969. . . .	.7	.4	2.4	.5	.2	4.2
1970. . . .	.7	.4	2.5	.5	.4	4.5
1971. . . .	.7	.4	2.4	.5	.3	4.3
1972. . . .	.7	.4	2.9	.5	.4	4.9
1973. . . .	.4	.5	3.1	.5	.5	5.0
1974. . . .	.3	.4	3.1	.6	.4	4.8
1975. . . .	.4	.2	2.9	.4	.4	4.3
1976 (1). .	.4	.3	2.9	.4	.3	4.3
1977 (1). .	.5	.3	2.9	.6	.3	4.6
1978 (1). .	.6	.3	3.3	.5	.3	5.0

(1) Preliminary.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1960-78

Year	Fillets and steaks (1)	Sticks and portions	Shrimp, all preparations
		Pounds (2)	
1960.	1.64	0.63	1.08
1961.	1.67	.71	1.01
1962.	1.77	.82	1.02
1963.	1.60	.92	1.17
1964.	1.62	.98	1.16
1965.	1.68	1.12	1.24
1966.	1.74	1.14	1.21
1967.	1.64	1.21	1.29
1968.	1.86	1.32	1.37
1969.	2.01	1.63	1.31
1970.	2.17	1.73	1.44
1971.	2.04	1.63	1.39
1972.	2.29	1.79	1.44
1973.	2.54	2.00	1.36
1974.	2.14	1.84	1.51
1975.	2.42	1.80	1.41
1976 (3).	2.55	2.07	1.50
1977 (3).	2.55	2.05	*1.59
1978 (3).	*2.61	*2 17	1.51

(1) Data include groundfish and other species. Data do not include blocks, but fillets could be made into blocks from which sticks and portions could be produced.
(2) Product weight of fillets and steaks and sticks and portions, edible weight of shrimp.
(3) Preliminary.
*Record.

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH, BY REGION AND COUNTRY, 1975

Region and country	Estimated live weight equivalent	
	Kilograms	Pounds
North America:		
Canada	16.6	36.6
United States	15.9	35.1
Latin America:		
Argentina	6.5	14.3
Bolivia	1.2	2.6
Brazil	7.3	16.1
Chile	15.1	33.3
Colombia	4.1	9.0
Costa Rica	4.6	10.1
Cuba	20.5	45.2
Dominican Republic	4.8	10.5
Ecuador	7.3	16.1
El Salvador	3.0	6.6
Guatemala	1.1	2.4
Guyana	21.9	48.3
Haiti	1.3	2.9
Honduras	1.1	2.4
Jamaica	21.3	47.0
Mexico	4.6	10.1
Nicaragua	4.4	9.7
Panama	10.8	23.8
Paraguay	1.1	2.4
Peru	15.0	33.1
Puerto Rico	25.0	55.1
Surinam	20.2	44.5
Trinidad and Tobago	10.1	22.3
Uruguay	4.7	10.4
Venezuela	11.7	25.8
Europe:		
Albania	1.6	3.5
Austria	7.4	16.3
Belgium and Luxembourg	17.5	38.6
Bulgaria	14.0	30.9
Czechoslovakia	7.5	16.5
Denmark	34.6	76.3
Fed. Republic of Germany	11.5	25.4
Finland	22.1	48.7
France	21.5	47.4
German Democratic Rep.	20.2	44.5
Greece	14.8	32.6
Hungary	4.7	10.4
Iceland	66.8	147.3
Ireland	11.0	24.3
Italy	12.8	28.2
Malta	12.3	27.1
Netherlands	13.2	29.1
Norway	47.2	104.1
Poland	22.1	48.7
Portugal	50.4	111.1
Romania	7.3	16.1
Spain	38.5	84.9
Sweden	29.8	65.7
Switzerland	10.8	23.8
United Kingdom	17.9	39.5
Yugoslavia	3.7	8.2
USSR	27.9	61.5
Near East:		
Afghanistan	.1	.2
Cyprus	6.3	13.9
Egypt	3.4	7.5
Iran	1.2	2.6
Iraq	2.3	5.1
Israel	14.6	32.2
Jordan	2.5	5.5
Lebanon	2.9	6.4
Libya	6.9	15.2
Saudi Arabia	6.4	14.1
Sudan	1.4	3.1
Syria	1.6	3.5
Turkey	5.2	11.5
Yemen Arab Republic	1.6	3.5
Yemen (Aden)	18.8	41.4
Far East:		
Bangladesh	11.4	25.1
Burma	13.5	29.8
Cambodia	10.4	22.9
China, mainland	8.7	19.2
Hong Kong	49.3	108.7
India	3.4	7.5
Indonesia	9.5	20.9
Japan	74.7	164.7
Laos	6.1	13.4
Malaysia	23.7	52.2
Sabah	42.1	92.8
Sarawak	32.0	70.5
West Malaysia	21.3	47.0
Mongolia	.7	1.5
Nepal	.2	.4
North Korea	28.6	63.1
Pakistan	1.2	2.6
Philippines	33.8	74.5
Republic of Korea	37.0	81.6
Singapore	50.3	110.9
Sri Lanka (Ceylon)	10.4	22.9
Thailand	20.3	44.8
Vietnam	26.3	58.0
Africa:		
Algeria	2.2	4.9
Angola	7.8	17.2
Benin	12.2	26.9
Burundi	4.4	9.7
Cameroon	13.6	30.0

See footnote at end of table.

(Continued)

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH,
BY REGION AND COUNTRY, 1975 - Continued

Region and country	Estimated live-weight equivalent	
	Kilograms	Pounds
Africa - Continued:		
Central African Empire	6.4	14.1
Chad	15.8	34.8
Congo (Brazzaville)	23.4	51.6
Ethiopia	.5	1.1
Gabon	13.5	29.8
Gambia	24.6	54.2
Ghana	28.1	61.9
Guinea	3.6	7.9
Ivory Coast	24.7	54.5
Kenya	2.6	5.7
Liberia	16.6	36.6
Madagascar	6.2	13.7
Malawi	14.5	32.0
Mali	9.1	20.1
Mauritania	22.0	48.5
Mauritius	15.2	33.5
Morocco	4.8	10.6
Mozambique	3.1	6.8
Niger	2.1	4.6
Nigeria	6.8	15.0
Republic of South Africa	8.9	19.6
Rhodesia	2.9	6.4
Rwanda	.3	.7
Senegal	37.6	82.9
Sierra Leone	25.9	57.1
Somalia	1.0	2.2
Tanzania	11.7	25.8
Togo	11.6	25.6
Tunisia	5.8	12.8
Uganda	15.7	34.6
Upper Volta	1.0	2.2
Zaire	9.0	19.8
Zambia	13.1	28.9
Oceania:		
Australia	13.6	30.0
New Zealand	16.1	35.5
World	13.1	28.9

Note:--Data for most countries are tentative.

Source:--Food and Agriculture Organization of the United Nations (FAO), Rome.

PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1978

Area and State	Canned fishery products	Industrial fishery products	Fish fillets and steaks	Total plants, exclusive of duplication
	Number			
New England:				
Maine	18	7	23	45
Massachusetts	1	3	56	60
Rhode Island	-	1	1	2
Total	19	11	80	107
Middle Atlantic:				
New York	4	2	14	19
New Jersey	13	3	4	20
Pennsylvania	3	1	-	4
Delaware	2	-	-	2
Total	22	6	18	45
Chesapeake:				
Maryland	-	5	-	5
Virginia	3	6	3	11
Total	3	11	3	16
South Atlantic and Gulf:				
North Carolina	3	14	22	38
South Carolina	2	-	3	5
Georgia	-	2	1	3
Florida	1	2	19	22
Alabama	-	1	-	1
Mississippi	6	4	-	10
Louisiana	10	25	-	33
Texas	-	1	-	1
Total	22	49	45	113
Inland States:				
Illinois	-	-	7	7
Iowa	-	1	3	4
Kansas	1	-	-	1
Michigan	2	-	11	13
Minnesota	-	-	3	3
New York	-	-	2	2
North Dakota	-	-	1	1
Ohio	2	-	9	11
Pennsylvania	-	-	2	2
Wisconsin	3	1	12	15
Total	8	2	50	59
Pacific:				
Alaska	70	3	-	73
Washington	25	12	19	53
Oregon	10	5	11	25
California	17	14	23	47
Total	122	34	53	198
Hawaii	1	1	-	1
American Samoa	2	2	-	2
Puerto Rico	5	4	-	5
Grand Total	204	120	249	546

VESSELS CONSTRUCTED IN 1977 FOR THE U.S. FISHING FLEET

Gross tonnage	By tonnage groups								
	New England	Middle Atlantic	Chesa-peake	South Atlantic	Gulf	Pacific Coast	Great Lakes	Hawaii	Total
	Number								
5 - 9	19	3	19	10	24	70	-	2	147
10 - 19	35	3	25	32	61	166	4	2	328
20 - 29	3	3	3	23	46	63	1	2	144
30 - 39	6	3	1	15	30	46	1	1	103
40 - 49	4	1	-	3	25	28	-	-	61
50 - 59	4	1	-	5	16	6	-	-	32
60 - 69	2	-	-	3	12	5	-	1	23
70 - 79	-	-	-	5	6	8	-	-	19
80 - 89	-	1	1	6	21	4	-	-	33
90 - 99	2	1	1	11	66	-	-	-	81
100 - 109	-	-	2	8	60	-	-	-	70
110 - 119	1	-	1	3	33	1	-	-	39
120 - 129	1	-	-	-	30	2	-	-	33
130 - 139	4	1	1	-	2	1	-	-	9
140 - 149	10	1	1	2	12	1	-	-	27
150 - 159	-	-	-	1	2	-	-	-	3
160 - 169	2	-	1	-	6	-	-	-	9
170 - 179	1	1	-	-	1	1	-	-	4
180 - 189	1	1	-	-	-	1	-	-	3
190 - 199	2	-	-	-	1	6	-	-	9
260 - 269	-	-	-	-	1	-	-	-	1
460 - 469	-	-	-	-	1	-	-	-	1
530 - 539	-	-	-	-	1	-	-	-	1
630 - 639	-	-	-	-	1	-	-	-	1
1150 - 1159	-	-	-	-	-	2	-	-	2
Total vessels	97	20	56	127	458	411	6	8	1,183

Length in feet	By length distribution								
	New England	Middle Atlantic	Chesa-peake	South Atlantic	Gulf	Pacific Coast	Great Lakes	Hawaii	Total
	Number								
20 - 29	15	3	6	9	12	121	1	2	169
30 - 39	41	4	26	41	86	163	1	3	365
40 - 49	9	5	15	32	73	89	4	2	229
50 - 59	6	3	1	11	37	19	-	1	78
60 - 69	5	1	5	26	189	7	-	-	233
70 - 79	15	2	3	7	50	2	-	-	79
80 - 89	5	1	-	1	7	3	-	-	17
90 - 99	1	1	-	-	1	4	-	-	7
160 - 169	-	-	-	-	3	1	-	-	4
200 - 209	-	-	-	-	-	2	-	-	2
Total vessels	97	20	56	127	458	411	6	8	1,183

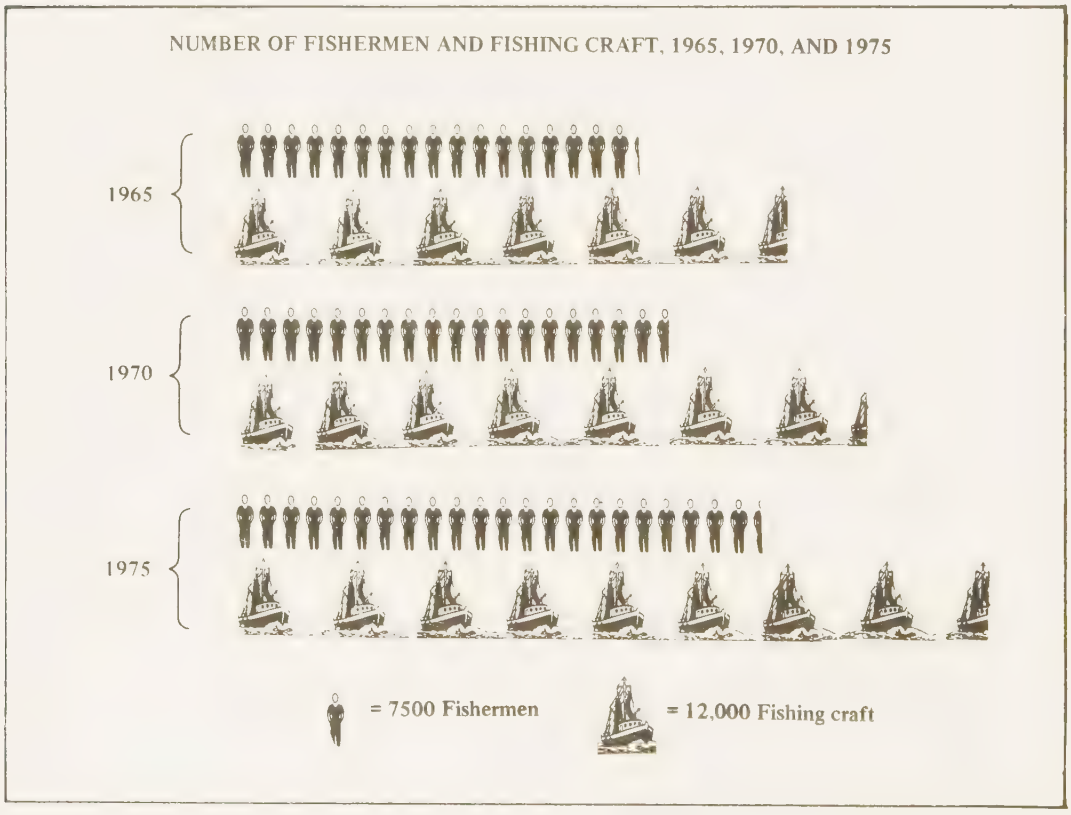
See note at end of table.

(Continued)

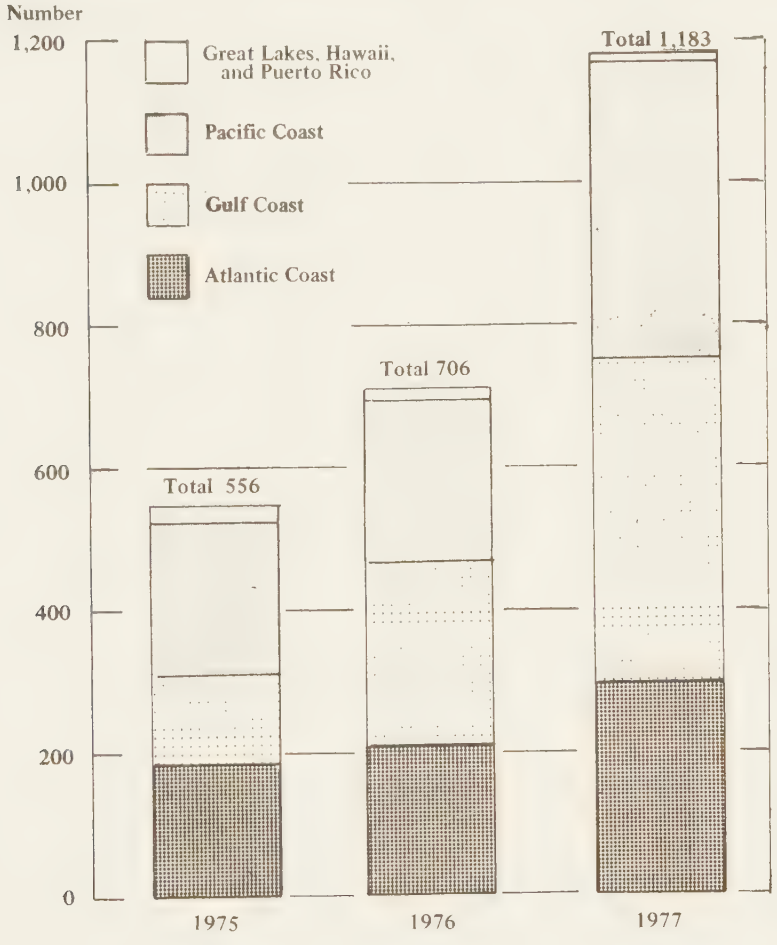
VESSELS CONSTRUCTED IN 1977 FOR THE U.S. FISHING FLEET - Continued

Horsepower	By horsepower distribution								
	New England	Middle Atlantic	Chesapeake	South Atlantic	Gulf	Pacific Coast	Great Lakes	Hawaii	Total
	Number								
Under 100	-	-	-	1	6	33	1	-	41
100 - 199	31	2	8	25	81	98	3	1	249
200 - 299	22	6	23	37	69	147	1	3	308
300 - 399	16	6	22	42	251	82	1	-	420
400 - 499	4	3	-	7	21	11	-	3	49
500 - 599	17	-	-	9	11	23	-	1	61
600 - 699	4	1	-	4	10	5	-	-	24
700 - 799	1	1	2	1	4	3	-	-	12
800 - 899	2	1	1	1	-	4	-	-	9
900 - 999	-	-	-	-	1	1	-	-	2
1000 - 1099	-	-	-	-	-	1	-	-	1
1100 - 1199	-	-	-	-	-	1	-	-	1
1300 - 1399	-	-	-	-	1	-	-	-	1
1800 - 1899	-	-	-	-	3	-	-	-	3
3600 - 3699	-	-	-	-	-	2	-	-	2
Total vessels	97	20	56	127	458	411	6	8	1,183

Note:--The above data represent the number of vessels documented by the U.S. Coast Guard as being constructed in 1977 for commercial fishing. It is possible that not all of the above vessels actually engaged in fishing. Data on commercial fishing vessels that were redocumented or that received first documentation are not readily available.



VESSELS CONSTRUCTED FOR THE DOMESTIC FISHING FLEET, BY AREA, 1975-77



PROCESSING AND WHOLESALE ESTABLISHMENTS AND EMPLOYMENT, 1977 AND 1976

Area and State	1977									1976		
	Processing			Wholesale			Total			Total		
	Plants	Employment average		Plants	Employment average		Plants	Employment average		Plants	Employment average	
		Season	Year		Season	Year		Season	Year		Season	Year
	Number											
New England:												
Maine	90	3,798	2,688	143	454	329	233	4,252	3,017	239	4,495	3,114
New Hampshire	11	465	434	3	14	10	14	479	444	13	583	501
Massachusetts	123	5,302	4,454	86	951	831	209	6,253	5,285	210	5,389	4,505
Rhode Island	18	342	297	14	68	57	32	410	354	32	353	298
Connecticut	4	35	30	5	28	25	9	63	55	9	76	64
Total	246	9,942	7,903	251	1,515	1,252	497	11,457	9,155	503	10,896	8,482
Middle Atlantic:												
New York	38	902	805	214	2,021	1,830	252	2,923	2,635	241	2,770	2,456
New Jersey	40	1,843	1,519	66	333	297	106	2,176	1,816	106	2,245	1,889
Pennsylvania	15	939	774	19	235	234	34	1,174	1,008	36	1,189	1,118
Delaware	4	575	415	7	24	21	11	599	436	12	513	396
Total	97	4,259	3,513	306	2,613	2,382	403	6,872	5,895	395	6,717	5,859
Chesapeake:												
District of Columbia	-	-	-	6	83	83	6	83	83	6	83	83
Maryland	90	3,376	2,414	79	455	347	169	3,831	2,761	174	4,163	3,206
Virginia	125	4,851	3,708	55	375	333	180	5,226	4,041	193	5,938	4,447
Total	215	8,227	6,122	140	913	763	355	9,140	6,885	373	10,184	7,736
South Atlantic:												
North Carolina	76	1,908	1,293	144	620	477	220	2,528	1,770	251	2,443	1,741
South Carolina	18	585	413	92	410	256	110	995	669	97	1,123	807
Georgia	13	1,786	1,540	39	362	215	52	2,148	1,755	58	2,410	1,911
Florida, East Coast	39	1,231	1,020	67	210	203	106	1,441	1,223	116	1,479	1,236
Total	146	5,510	4,266	342	1,602	1,151	488	7,112	5,417	522	7,455	5,695
Gulf:												
Florida, West Coast	107	4,228	3,482	172	566	512	279	4,794	3,994	278	4,602	3,912
Alabama	48	2,236	1,437	16	124	82	64	2,360	1,519	57	2,026	1,405
Mississippi	35	1,642	1,155	16	101	68	51	1,743	1,223	52	1,660	1,203
Louisiana	121	4,411	2,943	91	489	383	212	4,900	3,326	200	4,461	3,262
Texas	53	2,272	1,584	86	1,725	794	139	3,997	2,378	139	3,260	2,363
Total	364	14,789	10,601	381	3,005	1,839	745	17,794	12,440	726	16,009	12,145
Pacific:												
Alaska (1)	225	10,000	6,500	-	-	-	225	10,000	6,500	225	9,500	6,200
Washington	91	2,954	2,071	31	786	486	122	3,740	2,557	130	3,872	2,612
Oregon	50	2,985	1,944	19	137	95	69	3,122	2,039	72	2,647	1,786
California	92	11,502	8,797	113	1,055	937	205	12,557	9,734	160	10,478	8,836
Total	458	27,441	19,312	163	1,978	1,518	621	29,419	20,830	587	26,497	19,434

See footnote at end of table.

(Continued)

PROCESSING AND WHOLESALE ESTABLISHMENTS AND EMPLOYMENT, 1977 AND 1976 - Continued

Area and State	1977									1976		
	Processing			Wholesale			Total			Total		
	Plants	Employment average		Plants	Employment average		Plants	Employment average		Plants	Employment average	
		Season	Year		Season	Year		Season	Year		Season	Year
	Number											
Inland Areas:												
Great Lakes:												
New York	3	8	8	13	175	165	16	183	173	16	168	159
Ohio	13	485	397	11	59	53	24	544	450	23	529	444
Michigan	18	192	153	23	220	208	41	412	361	44	420	364
Illinois	7	364	333	22	467	440	29	831	773	30	776	729
Indiana	-	-	-	3	14	13	3	14	13	3	21	20
Wisconsin	20	198	180	8	41	36	28	239	216	29	305	281
Minnesota and Pennsylvania	4	143	71	4	58	56	8	201	127	10	213	133
Total	65	1,390	1,142	84	1,034	971	149	2,424	2,113	155	2,432	2,130
Mississippi River:												
Alabama and Arkansas	3	75	56	47	143	134	50	218	190	50	237	202
Colorado and Idaho	8	430	430	7	20	15	15	450	445	17	435	380
Illinois	9	26	23	13	51	46	22	77	69	22	131	119
Indiana	-	-	-	7	69	64	7	69	64	7	72	69
Iowa	6	73	62	9	107	102	15	180	164	15	129	114
Kansas, Kentucky, Oklahoma, and Tennessee	4	174	165	74	318	296	78	492	461	87	428	394
Louisiana	18	265	160	20	77	74	38	342	234	40	363	247
Minnesota	5	107	68	5	24	22	10	131	90	11	103	66
Mississippi	3	140	120	11	30	29	14	170	149	14	195	155
Missouri and Texas	4	241	208	46	313	291	50	554	499	53	542	490
Nebraska	-	-	-	4	12	11	4	12	11	5	18	18
North Dakota, South Dakota, Nevada, and Utah	5	45	40	9	59	56	14	104	96	14	117	101
Ohio	-	-	-	4	13	13	4	13	13	4	13	13
Wisconsin	6	57	55	10	164	152	16	221	207	17	215	203
Total	71	1,633	1,387	266	1,400	1,305	337	3,033	2,692	356	2,998	2,571
Other:												
Hawaii and American Samoa	19	1,857	1,724	19	251	251	38	2,108	1,975	38	1;948	1,666
Puerto Rico	5	6,682	5,622	-	-	-	5	6,682	5,622	5	6,727	5,978
Total	24	8,539	7,346	19	251	251	43	8,790	7,597	43	8,675	7,644
Grand total	1,686	81,730	61,592	1,952	14,311	11,432	3,638	96,041	73,024	3,660	91,863	71,696

(1) Data are estimated for Alaska.

EMPLOYMENT, CRAFT, AND PLANTS

FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1960-75

Item	1960	1965	1970	1973	1974	1975
	Number					
Persons employed:						
Fishermen	130,431	128,565	140,538	148,884	161,361	168,013
Processing and wholesaling (1)	93,625	86,864	86,813	93,792	92,118	(2)92,310
Total	224,056	215,429	227,351	242,676	253,479	260,323
Craft used:						
Vessels (3)	12,018	12,311	13,591	15,396	15,891	16,211
Motor boats	56,889	63,828	71,570	72,362	83,438	85,290
Other boats	8,150	3,393	2,000	2,259	1,907	1,693
Total	77,057	79,532	87,161	90,017	101,236	103,194
Shore establishments:						
Pacific Coast States	515	557	510	520	595	587
Atlantic Coast and Gulf States	2,898	2,931	2,618	2,464	2,403	2,499
Great Lakes and Mississippi River States	772	673	564	520	487	512
Other areas	(4)22	(4)24	(5)43	(5)48	(5)49	(2) 8
Total	4,207	4,185	3,735	3,552	3,534	3,606

(1) Average for season.
(2) Only a partial survey of processing and wholesaling plants was made in Hawaii in 1975. NMFS estimates that about 300 employees and 35 plants were operating in 1975.
(3) Craft 5 net tons and over as documented by U.S. Coast Guard.
(4) Hawaii only.
(5) Hawaii, American Samoa, and Puerto Rico.

FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR 1978

Region	Edible fishery products								Fish meal	
	Establishments (1)			Amount inspected					Establishments	Amount inspected (8)
	SIFE (2)	PUFI (3)	MP (4)	Grade A (5)	PUFI (5)	No mark (6)	Lot (7)	Total		
	Number			Thousand pounds					Number	Tons
Northeast.	5	25	9	129,147	144,611	26,765	13,598	314,121	5	68,500
Southeast.	5	21	5	11,104	104,199	9,880	9,572	134,755	15	198,900
West . . .	1	14	9	9,446	96,306	7,636	54,565	167,953	-	-
Total, 1978. .	11	60	23	149,697	345,116	44,281	77,735	616,829	20	267,400
Total, 1977. .	19	51	16	145,611	354,228	39,823	60,814	600,476	20	186,600

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment, processing techniques, and employment practice. These establishments include two shrimp trawlers. (2) Fish processing establishments approved for sanitation under the Sanitarily Inspected Fish Establishment Service (SIFE). Products are not processed under inspection. (3) Sanitarily inspected fish establishments processing fishery products under U.S. Department of Agriculture (USDA) inspection. (4) Plants under inspection for military purchase (MP) products only. (5) Products processed under inspection in inspected establishments and labeled with USDC inspection mark as "Packed Under Federal Inspection" (PUFI) or "U.S. Grade A." (6) Products processed under inspection in inspected establishments but bearing no USDC inspection mark. (7) Lot inspected products checked for quality and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States. (8) This product is under the USDC Salmonella Control Inspection Service.

Source:--NMFS, Seafood Quality and Inspection Division.

FISHERY COOPERATIVES IN THE UNITED STATES, PUERTO RICO, AND VIRGIN ISLANDS, 1978 (1)

Region and State or area	Total cooperatives	Members	Fishing craft	Functions performed by cooperatives: Marketing and purchasing	Marketing exclusively	Purchasing exclusively	Collective bargaining	Marketing purchasing, and bargaining	Other
	Number								
New England:									
Maine	15	869	594	13	-	-	1	-	1
Massachusetts	5	924	509	5	-	-	-	-	-
Rhode Island	2	170	90	1	1	-	-	-	-
Connecticut	1	64	24	-	1	-	-	-	-
Total	23	2,027	1,217	19	2	-	1	-	1
Middle Atlantic:									
New York	1	25	20	-	-	1	-	-	-
New Jersey	3	97	43	1	2	-	-	-	-
Total	4	122	63	1	2	1	-	-	-
South Atlantic and Gulf:									
Florida	4	133	132	2	2	-	-	-	-
Georgia	1	174	190	1	-	-	-	-	-
Louisiana	2	150	137	2	-	-	-	-	-
North Carolina	2	275	200	-	2	-	-	-	-
South Carolina	2	35	11	1	1	-	-	-	-
Texas	4	136	208	-	4	-	-	-	-
Total	15	903	878	6	9	-	-	-	-
Great Lakes and inland:									
Minnesota	2	155	103	1	1	-	-	-	-
Ohio	1	5	5	-	1	-	-	-	-
Total	3	160	108	1	2	-	-	-	-
Pacific Coast:									
California	18	2,768	2,371	-	9	-	1	6	2
Oregon	1	500	500	-	1	-	-	-	-
Washington	4	837	796	1	3	-	-	-	-
Total	23	4,105	3,667	1	13	-	1	6	2
Alaska	12	2,217	2,023	3	2	-	1	4	2
Puerto Rico	1	16	3	-	1	-	-	-	-
Virgin Islands	2	84	65	-	-	-	-	2	-
Grand total	83	9,634	8,024	31	31	1	3	12	5

(1) Information on number of members, number of craft, and functions performed is preliminary.

Source:--NMFS, Fisheries Development Division.

UNITED STATES DEPARTMENT OF COMMERCE

WASHINGTON, DC 20235

Mail routing code		Telephone number	Location
—	Secretary of Commerce, Juanita M. Kreps 14th and E Sts., NW. Washington, DC 20230	202-377-2112	Washington, D.C. Commerce
A	National Oceanic and Atmospheric Administration Administrator, Richard A. Frank 14th and E Sts., NW. Washington, DC 20230	202-377-3567	Commerce
	NATIONAL MARINE FISHERIES SERVICE--CENTRAL OFFICE		
F	Assistant Administrator for Fisheries, Terry L. Leitzell	202-634-7283	Page 2 Bldg.
F	Deputy Assistant Administrator, Jack W. Gehringer	202-634-7243	Page 2 Bldg.
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Fx3	Deputy, Robert K. Crowell	202-634-7405	Page 2 Bldg.
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FX33	Budget Operations Staff, David H. Rand	202-634-7444	Page 2 Bldg.
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FX5	Deputy, Vacant		
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F2	Deputy, Joseph W. Slavin	202-634-7261	Page 2 Bldg.
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F22	Seafood Quality and Inspection Division, Thomas J. Billy	202-634-7458	Page 2 Bldg.
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F26	Consumer Affairs Division, Clarence E. Cope (Acting)	202-634-7422	Page 2 Bldg.
F224	National Seafood Quality and Inspection Laboratory, E. Spencer Garrett P.O. Drawer 1207 Pascagoula, MS 39567	202-762-4591	Pascagoula, MS

(Continued)

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	CENTRAL OFFICE - Continued		
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F3	Deputy, Roland F. Smith	202-634-7218	Page 2 Bldg.
F3X1	Recreational Fisheries, Robert F. Hutton (Acting)	202-254-5536	Page 2 Bldg.
F3X2	Council Coordinator, (Vacant)		
F31	State/Federal Division, Richard H. Schaefer	202-634-7454	Page 2 Bldg.
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	Director, David H. Wallace	202-634-7514	Page 2 Bldg.
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F5	Deputy, (Vacant)		
F5	Fishery Administrator, Robert F. Scott	202-634-7469	Page 2 Bldg.
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	Director, William Aron	202-634-7461	Page 2 Bldg.
F6	Deputy, Richard B. Roe	202-634-7461	Page 2 Bldg.
F7	Office of Habitat Protection, Director, Kenneth R. Roberts (Acting)	202-634-7490	Page 2 Bldg.

Location of Page Buildings

Page 1 Building is in upper Georgetown at 2001 Wisconsin Ave., NW., Washington, D.C. The Page 2 Building is behind the Page 1 Building at 3300 Whitehaven St., NW.

Mailing address

Use of the mail routing code will speed your mail. A sample address is as follows: Name and title, National Marine Fisheries Service (F), U.S. Department of Commerce, NOAA, Washington, DC 20235

Mail routing code		Telephone number	Location
	REGIONAL OFFICES		
FNE	Northeast Region Vacant, Director Federal Bldg., 14 Elm St. Gloucester, MA 01930	617-281-3600 Ext. 250	Gloucester, MA
FSE	Southeast Region William H. Stevenson, Director Duval Bldg., 9450 Koger Blvd. St. Petersburg, FL 33702	813-893-3142	St. Petersburg, FL
FSW	Southwest Region Gerald V. Howard, Director 300 South Ferry St. Terminal Island, CA 90731	213-548-2575	Terminal Island, CA
	Western Pacific Program Office Doyle E. Gates, Administrator 2570 Dole St., Box 3830 Honolulu, HI 96812	808-946-2181	Honolulu, HI
FNW	Northwest Region Donald R. Johnson, Director 1700 Westlake Ave., North Seattle, WA 98109	206-442-7575	Seattle, WA
FNW5	Environmental and Technical Services Division, Dale R. Evans, Chief 811 N.E. Oregon St., P.O. Box 4332 Portland, OR 97208	503-234-3361 Ext. 4301	Portland, OR
FAK	Alaska Region Harry L. Rietze, Director Federal Bldg., Room 453 709 West Ninth St., P.O. Box 1668 Juneau, AK 99802	907-586-7221	Juneau, AK
	FISHERIES CENTERS AND LABORATORIES		
F11	Northwest and Alaska Fisheries Center Dayton L. Alverson, Director 2725 Montlake Blvd., East Seattle, WA 98112	206-442-4760	Seattle, WA
F11x9	Auke Bay Laboratory William Smoker, Director P.O. Box 155 Auke Bay, AK 99615	907-789-7231	Auke Bay, AK
F1181	Kodiak Laboratory Robert Wolotira, Director P.O. Box 1638 Kodiak, AK 99615	907-487-4961	Kodiak, AK
F12	Southeast Fisheries Center William W. Fox, Jr., Director 75 Virginia Beach Dr. Miami, FL 33149	305-361-5761	Miami, FL
F121	Miami Laboratory William J. Richards, Director Address same as above	Same as above	
F123	Pascagoula Laboratory Andrew J. Kemmerer, Acting Director 3209 Frederick St., P.O. Drawer 1207 Pascagoula, MS 39567	601-762-4591	Pascagoula, MS
F124	National Fisheries Engineering Lab. Andrew J. Kemmerer, Director National Space Technology Labs NSTL Station, MS 39529	601-688-3650	NSTL Station, MS
F125	Panama City Laboratory Eugene L. Nakamura, Director P.O. Box 4218 Panama City, FL 32401	904-234-6541	Panama City, FL

(Continued)

Mail routing code		Telephone number	Location
	FISHERIES CENTERS AND LABORATORIES - Continued		
F126	Galveston Laboratory Edward J. Klima, Director 4700 Avenue U Galveston, TX 77550	713-763-1211 Ext. 501	Galveston, TX
F128	Charleston Laboratory Harry L. Seagran, Director P.O. Box 12607 Charleston, SC 29412	803-724-4770	Charleston, SC
F129	Beaufort Laboratory Theodore Rice, Director P.O. Box 570 Beaufort, NC 28516	919-728-4595	Beaufort, NC
F13	Northeast Fisheries Center Robert L. Edwards, Director Woods Hole, MA 02543	617-548-5123	Woods Hole, MA
F131	Woods Hole Laboratory Richard C. Hennemuth, Director Woods Hole, MA 02543	617-548-5123	Woods Hole, MA
F132	Narragansett Laboratory Kenneth Sherman, Director Route 7A, P.O. Box 522A Narragansett, RI 02882	401-789-9326	Narragansett, RI
F133	Milford Laboratory James E. Hanks, Director Milford, CT 06460	203-878-2459	Milford, CT
F134	Sandy Hook Laboratory Carl J. Sinderman, Director P.O. Box 428 Highlands, NJ 07732	201-872-0200	Highlands, NJ
F135	Oxford Laboratory Aaron Rosenfield, Director Oxford, MD 21654	301-226-5193	Oxford, MD
F136	Gloucester Laboratory Louis J. Ronsivalli, Director Emerson Ave., P.O. Box 61 Gloucester, MA 01930	617-281-3600	Gloucester, MA
F137	National Systematics Laboratory Daniel M. Cohen, Director 10th St. and Constitution Ave., NW. Washington, DC 20560	202-381-5751	Washington, DC
F138	Atlantic Environmental Group Merton C. Ingham, Director Route 7A, P.O. Box 522A Narragansett, RI 02882	401-789-9326	Narragansett, RI
F14	Southwest Fisheries Center Izadore Barrett, Director 8604 La Jolla Shores Dr. P.O. Box 271 La Jolla, CA 92038	714-453-2820	La Jolla, CA
F142	Honolulu Laboratory Richard S. Shomura, Director 2570 Dole St., P.O. Box 3830 Honolulu, HI 96812	808-946-2181	Honolulu, HI
F143	Tiburon Laboratory Norman Abramson, Director 3150 Paradise Dr. Tiburon, CA 94920	415-556-0565	Tiburon, CA
F144	Pacific Environmental Group Gunter Seckel, Chief c/o Fleet Numerical Weather Central Monterey, CA 93940	408-373-3331	Monterey, CA

(Continued)

PUBLICATIONS OFFICE

FNW1	Scientific Publications Office Jack M. McCormick, Chief 1107 NE. 45th St., Rm. 450 Seattle, WA 98105	206-442-4232	Seattle, WA

REGIONAL FISHERY MANAGEMENT COUNCILS

Council	Telephone number	Executive Director
NEW ENGLAND:		
(Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut)	617-535-5450	Douglas G. Marshall, Peabody Office Bldg., One Newbury St., Peabody, MA 01960
MID ATLANTIC:		
(New York, New Jersey, Delaware, Pennsylvania, Maryland, and Virginia)	302-674-2331	John C. Bryson, Federal Bldg., Room 2115 North and New Sts., Dover, DE 19901
SOUTH ATLANTIC:		
(North Carolina, South Carolina, Georgia, and Florida)	803-571-4366	Ernest D. Premetz, Southpark Bldg., Suite 306 1 Southpark Circle, Charleston, SC 29407
GULF OF MEXICO:		
(Texas, Louisiana, Mississippi, Alabama, and Florida)	813-228-2815	Wayne E. Swingle, Lincoln Center, Suite 881 5401 W. Kennedy Blvd., Tampa, FL 33609
CARIBBEAN:		
(Puerto Rico and Virgin Islands)	809-753-6910	Omar Munoz-Roure, Banco de Ponce Bldg., Suite 1108 Hato Rey, Puerto Rico 00919
PACIFIC:		
(California, Washington, Oregon, and Idaho)	503-221-6352	Lorry Nakatsu, 526 SW. Mill St., Portland, OR 97201
NORTH PACIFIC:		
(Alaska, Washington, and Oregon)	907-274-4563	Jim Branson, 333 W. Fourth Ave., Suite 32 (Postal Address) P.O. Box 3136DT Anchorage, AK 99501
WESTERN PACIFIC:		
(Hawaii, American Samoa, Guam, and other Pacific areas)	808-523-1368	John C. Marr 1164 Bishop St., Suite 306 Honolulu, HI 96813

NATIONAL MARINE FISHERIES SERVICE

RESOURCE STATISTICS OFFICES

City	Telephone number	Name and address
		NORTHEAST REGION
NEW ENGLAND		
Eastport	207-853-4386	J. Philip Wentworth, 27 Washington St., Eastport, ME 04631
Portland	207-780-3322	Robert C. Morrill, U.S. Custom House, Room 16 Portland, ME 04101
Rockland	207-594-5969	Richard C. Barnard, Federal Bldg., Room 217 Rockland, ME 04841
(1)Gloucester	617-281-3600 Ext. 267	Frank Riley, 7 Pleasant St., Gloucester, MA 01930
Gloucester	617-281-3600 Ext. 304	Vito P. Giacalone, Jones-Hunt Bldg., Emerson Ave., Gloucester, MA 01930
New Bedford	617-997-0721 Ext. 256	Dennis E. Main, U.S. Custom House, 2nd and Williams Sts., New Bedford, MA 02360
Plymouth	617-746-6700	Paul O. Swain, Post Office Bldg., Plymouth, MA 02360
Provincetown	617-487-0868	William D. Sprague, Post Office Bldg., P.O. Box 91, Provincetown, MA 02657
Woods Hole	617-548-5123	Ronnie L. Schultz, Northeast Fisheries Center, Woods Hole, MA 02543
Newport	401-847-3115	William J. Murphy, Post Office Bldg., Newport, RI 02840
Pt. Judith	401-783-7797	Susan Murphy, P.O. Box 547, Pt. Judith, RI 02882
MIDDLE ATLANTIC		
Greenport	516-477-2425	Emerson C. Hasbrouck, Jr., 41 Front St., P.O. Box 7, Greenport, L.I., NY 11944
Patchogue	516-475-6988	Fred C. Blossom, P.O. Box 606, Patchogue, L.I., NY 11772
Pt. Pleasant	201-349-3533	Eugene Steady, 26 Main St., P.O. Box 143, Toms River, NJ 08753
Toms River	201-349-3533	Eugene A. LoVerde, P.O. Box 143, Toms River, NJ 08753
Cape May	609-884-2113	Robert Bailey, P.O. Box 624, Cape May, NJ 08204
CHESAPEAKE		
Easton	301-822-6976	William E. Brey, P.O. Box 356, Easton, MD 21601
Greenbackville	804-824-4725	George Ward, Biological Lab., Franklin City, Greenbackville, VA 23356
Hampton	804-723-3360	William N. Kelly, P.O. Box 447, Hampton, VA 23669
GREAT LAKES and NORTHERN MISSISSIPPI RIVER AREA		
Ann Arbor	617-281-3600 Ext. 298	John G. Terrill, 7 Pleasant St., Gloucester, MA 01930
		SOUTHEAST REGION
SOUTH ATLANTIC		
Beaufort	919-728-4595	Kenneth C. Harris, Pivers Island, P.O. Box 500, Beaufort, NC 28516
Charleston	803-724-4770	John C. Devane, Jr., 217 Ft. Johnson Rd., P.O. Box 12607, James Island, SC 29412
Savannah	912-232-4321 Ext. 367	Ted M. Flowers, Post Office Bldg., P.O. Box 8143, Savannah, GA 31402

(1) Regional headquarters for statistics offices.

(Continued)

NATIONAL MARINE FISHERIES SERVICE

RESOURCE STATISTICS OFFICES - Continued

City	Telephone number	Name and Address
		SOUTHEAST REGION - Continued
GULF		
Apalachicola	904-653-9500	Percy E. Thompson, Post Office Bldg., P.O. Drawer 189, Apalachicola, FL 32302
Fort Myers	813-334-4364	James E. Naughton, P.O. Box 217, Federal Bldg., Fort Myers, FL 33902
Key West	305-294-1921	Peter W. Maley, Post Office & Custom House Bldg., P.O. Box 269, Key West, FL 33040
(1)Miami	305-361-5761	Kimrey D. Newlin, 75 Virginia Beach Dr., Miami, FL 33149
Miami	305-361-5761	J. Ernest Snell, Address same as above
St. Petersburg	813-893-3151	Betty J. Guisinger, 9450 Koger Blvd., St. Petersburg, FL 33702
Bayou La Batre	205-824-4149	Donnie J. Bond, P.O. Box 591, D&H Furniture Bldg., Bayou La Batre, AL 36509
Pascagoula	601-762-4591	Hermes G. Hague, P.O. Drawer 1207, Ocean Springs, MS 39564
Galiano	504-475-7072	Morrison P. Duet, P.O. Box 162, Galiano, LA 70354
Houma	504-872-3321	Leryes J. Usie, Federal Bldg., 423 Lafayette St., Houma, LA 70360
Morgan City	504-385-2067	Vacant, P.O. Box 1817, Morgan City, LA 70380
New Orleans	504-589-6151	Orville M. Allen, 546 Carondelet St., New Orleans, LA 70130
Aransas Pass	512-758-3787	Madeline Bailey, Coastal Net and Supply Bldg., Conn Brown Harbor, P.O. Drawer EE, Aransas Pass, TX 78336
Aransas Pass	512-758-3787	Mary Magec, Address same as above
Brownsville	512-831-4050	Thomas N. Scott, Harbor Masters Bldg., Shrimp Basin, P.O. Box 467, Brownsville, TX 78520
Brownsville	512-831-4050	Shirley Windhorst. Address same as above
Freeport	713-233-4551	Richard A. Allen, Brazosport Savings Center, P.O. Box 2533, Freeport, TX 77541
Galveston	713-763-1211 Ext. 106	Orman H. Farley, Bldg. 306, Fort Crockett, Galveston, TX 77550
Galveston	713-763-1211 Ext. 106	James Morgan, Address same as above
Port Arthur	713-985-7871	Rene Labadens, Federal Office Bldg., Port Arthur, TX 77640
		SOUTHWEST REGION
(1)Terminal Island	213-548-2571	James R. Bybee, Customs House, Box 3266, 300 S. Ferry St., Terminal Island, CA 90731
Honolulu	808-946-2181	Doyle E. Gates, Honolulu Lab., P.O. Box 3830, Honolulu, HI 96812
		NORTHWEST REGION
(1)Seattle	206-442-5230	John K. Bishop, 1700 Westlake Ave. North, Seattle, WA 98109
		ALASKA REGION
(1)Juneau	907-586-7228	Janet E. Smoker, P.O. Box 1668, Juneau, AK 99801

(1) Regional headquarters for statistics offices.

PUBLICATIONS

FISHERY MARKET NEWS REPORTS

MARKET NEWS REPORTS

Fishery Market News reports give landings, market receipts, weekly and monthly cold storage holdings, exvessel prices, wholesale prices of fresh and frozen products, foreign trade data, current market developments, and other information for major fishery trading centers in the United States. The reports are issued from Boston, New York, New Orleans, Terminal Island, and Seattle.

You can order either the full service report (includes the weekly summary), or order only the weekly summary. The full service report is issued Monday, Wednesday, and Friday. The weekly summary is issued on Friday. The full service costs $35 a year. The Friday weekly summary costs $15 a year. The subscription period is 1 year beginning the first of the month following receipt of the order. For more information contact the nearest market news office. Free samples are available on request.

DIRECTORY

GLOUCESTER (Issues no printed report)

Robert A. Hall, Chief
Northeast Region Market News Branch
Post Office Bldg., Room 204
P.O. Box 1109, Dale Ave.
Gloucester, MA 01930
617-281-3600, Ext. 225

BOSTON BLUE SHEET

Louis R. O'Donnell, Supervisor
Commonwealth Pier
Boston, MA 02210
617-542-6070

NEW YORK GREEN SHEET

Joseph Ledner, Supervisor
201 Varick St.
New York, NY 10014
212-620-3405

DIRECTORY - Continued

BALTIMORE (Issues no printed report)

Edward A. Hardy, Reporter
40 South Gay St., Room 421
Baltimore, MD 21202
301-962-4272

HAMPTON (Issues no printed report)

Carolyn S. Gearhart, Reporter
P.O. Box 447
55 W. Queens Way
Hampton, VA 23669
804-723-3369

NEW ORLEANS GOLDENROD SHEET

Edward J. Barry, Supervisor
546 Carondelet St., Room 412
New Orleans, LA 70130
504-589-6151

TERMINAL ISLAND BUFF SHEET

James R. Bybee, Supervisor
P.O. Box 3266
300 South Ferry St.
Terminal Island, CA 90731
213-548-2572

SEATTLE PINK SHEET

John K. Bishop, Supervisor
1700 Westlake Ave., North, Room 732
Seattle, WA 98109
206-442-5230

CHICAGO (Issues no printed report)

Alphonse A. Autin, Reporter
610 South Canal St.
Chicago, IL 60607
312-353-5772

MESSAGE CENTERS

Recorded current market information is available around the clock at the following message centers:

Boston, MA 617-542-7878
Landings and exvessel price at Boston, Gloucester, and New Bedford, MA.

Chicago, IL 312-353-2260
Wholesale prices for sale of frozen headless shrimp in Chicago.

Gloucester, MA 617-283-1101
Boston landings and exvessel prices, New Bedford sea scallop and yellowtail flounder landings and prices, and Gloucester landings.

New Bedford, MA 617-997-6565
Landings and exvessel prices at New Bedford.

Hampton, VA 804-723-0303
Landings and exvessel prices for New Bedford and Boston, MA and landings at Fulton Market in New York, announced from 10:30 a.m. to 3:00 p.m. Monday through Friday. Wholesale prices at Baltimore, MD, and New York Fulton Market, announced 3:30 p.m. until 10:00 a.m. the following day, Monday through Thursday. Friday only, weekly summary of landings in the Hampton Roads area.

New York, NY 212-620-3577
Landings and exvessel prices at New York City; Boston, Gloucester, and New Bedford, MA, announced 10:15 a.m. to 3:00 p.m. Wholesale prices for sales at New York Fulton Market announced 3:15 p.m. to 10:00 a.m. the following day.

New York, NY 212-620-3244
Frozen seafood wholesale selling prices.

PUBLICATIONS

FISHERY MARKET NEWS REPORTS: INDEX

MONDAY, WEDNESDAY, AND FRIDAY

	BOSTON BLUE SHEET	NEW YORK GREEN SHEET	NEW ORLEANS GOLDENROD SHEET	TERMINAL ISLAND BUFF SHEET	SEATTLE PINK SHEET
RECEIPTS:					
Landings	New England Major Ports New York City	New England Major Ports New York City Gulf Area Finfish and Shrimp	Gulf Finfish, Shrimp, and Shellfish, by Area North Carolina, by District Florida Spiny Lobster Alaska Shrimp	U.S. Tuna and California Anchovy, Bonito, Mackerel, and Squid San Pedro Market Fish	Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut and Salmon
Market (truck, air, rail vessel)	Boston Shippers' Market and Live Lobsters	New York Fulton Market Baltimore Wholesale Market	New York Fulton Market, Selected Shellfish Chicago Shrimp Shellfish	San Pedro Market Fish	Seattle (except canned) Washington Oysters Alaska Coastwise Vessels
Canner	–		Shrimp Receipts at Canning Plants	U.S. Tuna and California Mackerel, and Squid	–
Imports	New England Chicago Detroit, Mich. Pembina, N.D. U.S. Frozen Blocks by Species and Country U.S. Selected Products by Country	New York City Customs District U.S. Shrimp by Country U.S. Shrimp by Size	Gulf Area U.S. Shrimp by Country U.S. Shrimp by Size	Tuna and Bonito by Species, Classification and Country. Arizona and Calif. Mexican Shrimp U.S. Shrimp by Size U.S. Selected Products by Country	Washington and Oregon U.S. Selected Products by Country
STOCKS:					
Cold Storage Holdings	New England (Weekly) National (Monthly)	– National (Monthly)	– National (Monthly)	– National (Monthly)	Northwest (Monthly) National (Monthly)
Canned Pack	–	–	–	U.S. Tuna and Bonito	–
PRICES:					
Exvessel	Boston and New Bedford Auction Sales Live Lobsters (Mass.)	Boston and New Bedford Auction Sales	–	U.S. Tuna Eureka-Crescent City Otter Trawl Fishery	Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut and Salmon
Wholesale (Fresh and frozen)	Boston Shellfish (Wed.) Live Lobsters (Bought by Wholesaler) Chicago Freshwater	New York and Baltimore Finfish, Shellfish, and Freshwater	New Orleans Baltimore Oysters and Softshell Crabs Chicago Shrimp New York Shellfish	–	New York Halibut and Salmon
Processors, Importers, and Brokers	Frozen Blocks, Fillets, Shellfish Speciality Items, etc. (Chicago, Boston, New Bedford and Gloucester) –	Frozen Shrimp, Lobster Tails, Other Shellfish, fillets Speciality Items, etc. –	New York Frozen Shrimp, and Lobster Tails Fish Meal, Oil, and Solubles	Canned Tuna and Bonito New England Frozen Blocks Fish Meal, Oil, and Solubles	Canned Salmon, Crab, and Shrimp Frozen Shrimp and Crab Washington Oysters Fish Meal, Oil, and Solubles

OTHER INFORMATION, ALL OFFICES: News Releases, NMFS and Council Notices. Export Opportunity. Selected Export Data, Situation and Outlook Reports, Selected Air and Rail Shipments, Foreign Fishing Off U.S. Coasts, International News (IFR)

FRIDAY WEEKLY SUMMARY

RECEIPTS:					
Landings	New England Ports	Chesapeake and North Carolina Areas	Gulf Finfish, Shrimp and Shellfish by Area North Carolina by District	California Tuna, Mackerel, and Anchovy Fisheries San Pedro Market	Seattle Otter Trawl Kodiak, all Fisheries Oregon, all Fisheries Northwest Halibut and Salmon
Market	Chicago Freshwater	New York Fulton Market Baltimore Market	–	San Pedro Market	Coastwise Vessels from Alaska Washington Oysters
Canner	–	–	Gulf Oyster, and Shrimp Pack	California Tuna, Bonito, Mackerel, and Anchovy	Alaska Canned Salmon Pack (Weekly)
Imports	–	–	–	Arizona and California	Oregon and Washington
PRICES:					
Exvessel	Boston and New Bedford	–	Weighted Average Shrimp by Area and Size	Tuna Eureka-Crescent City Otter Trawl Fishery	Seattle Otter Trawl Kodiak, all Fisheries Oregon, Selected Species Northwest Halibut and Salmon
Wholesale	Live Lobster Market Chicago Freshwater	New York Fulton Market Baltimore, Md. Market	New Orleans Fresh Fish	Canned Tuna and Bonito	Canned Salmon, Crab, and Shrimp Frozen Shrimp and Crab

PUBLICATIONS

PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

SHELLFISH MARKET REVIEW

FOOD FISH MARKET REVIEW

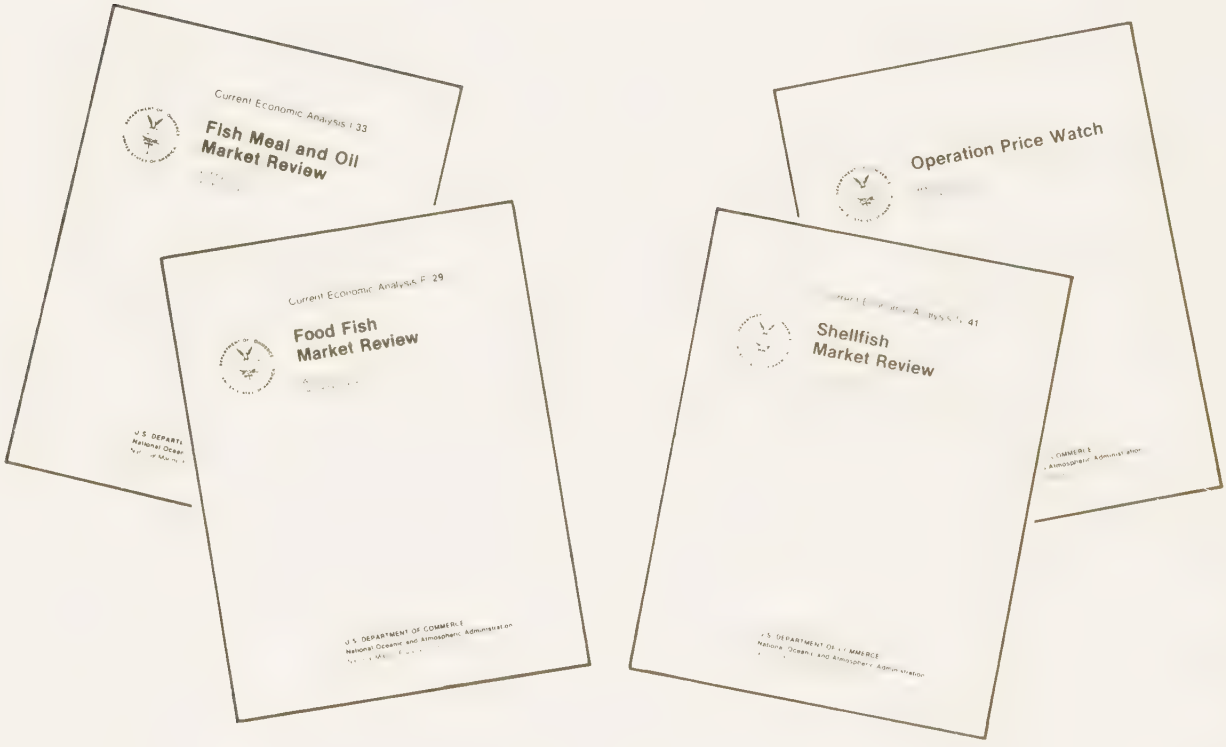
FISH MEAL AND OIL MARKET REVIEW

Each report is published several times a year. The reports provide description and analysis of those economic factors affecting markets for fishery products. The narrative includes a review of market trends, both historical and recent, and an outlook for the near future. Statistical tables are presented for landings, production, imports, inventories, supplies, apparent consumption, and prices (exvessel, wholesale, and retail).

OPERATION PRICE WATCH is based on an informal NMFS survey of retail prices of fish and other items. The reports are published monthly, and include prices of surveyed items in each of 10 cities, 10-city average prices, and three price indexes (fish, meat, and poultry). Because prices of some items, notably fresh fish, are not regularly available, they are not included in the 10-city averages, nor in the indexes. The three indexes differ from those published by the Bureau of Labor Statistics (BLS), which conducts separate formal surveys of retail prices for the Consumer Price Index (CPI).

Summaries of the reports shown on this page are published in the NMFS FISHERY MARKET NEWS REPORTS (see page 96).

Further information may be obtained from:
Fisheries Development Division (F21)
National Marine Fisheries Service
Washington, DC 20235
Phone (202) 634-7518 or 634-7353



PUBLICATIONS

PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

A partial list of National Marine Fisheries Service (NMFS) publications is shown on this page. Information on other publications produced by NMFS may be obtained by calling 301-443-8330 or writing:

User Services Branch, D822
Environmental Data and Information Service, NOAA
Rockville, MD 20852

CURRENT FISHERY STATISTICS (CFS) SERIES

The reports listed below are in the CFS (Current Fishery Statistics) series. They are statistical bulletins on marine recreational fishing and commercial fishing, and on the manufacture and commerce of fishery products. To obtain a subscription to these publications, check in the designated space ( ) and return to the originating office:

NOAA, National Marine Fisheries Service
Resource Statistics Division (F51)
Washington, D C 20235

Marine recreational fishing publications are released irregularly. If you wish a copy of the following publications, check in the designated space ( ) and return to the originating office shown above.

( ) *Participation in Marine Recreational Fishing, Northeastern United States, 1973-74*
( ) *Participation in Marine Recreational Fishing, Southeastern United States, 1974*

The following are preliminary bulletins on commercial landings by species. They are issued monthly and annually.

( ) NA-1 *Maine Landings*
( ) NA-2 *Massachusetts Landings*
( ) NA-3 *Rhode Island Landings*
( ) NA-4 *New York Landings*
( ) NA-5 *New Jersey Landings*

( ) SA-1 *Maryland Landings*
( ) SA-2 *Virginia Landings*
( ) SA-3 *North Carolina Landings*
( ) SA-4 *South Carolina Landings*
( ) SA-5 *Georgia Landings*

( ) GC-1 *Florida Landings*
( ) GC-2 *Alabama Landings*
( ) GC-3 *Mississippi Landings*
( ) GC-4 *Louisiana Landings*
( ) GC-5 *Texas Landings*
( ) GC-6 *Shrimp Landings*
( ) GCS *Gulf Coast Shrimp Data*

The bulletins listed below show annual data on U.S. commercial landings, fishermen and operating unit data, and the production of processed products, by States. Statistics published in these sectional summary bulletins are published later in *Fishery Statistics of the United States* (Statistical Digest) together with text and more detailed information on landings and operating units.

( ) SR
- *New England Fisheries*
- *Middle Atlantic Fisheries*
- *Chesapeake Fisheries*
- *South Atlantic Fisheries*
- *Gulf Fisheries*
- *Hawaii Fisheries*
- *Great Lakes Fisheries*
- *Mississippi River Fisheries*

The bulletins shown below cover freezings and holdings, the production of various processed products, and the U.S. foreign trade in fishery products. The annual data shown in the publications are later published in *Fishery Statistics of the United States.* To order *Fishery Statistics of the United States* from the Government Printing Office (GPO) or the National Technical Information Service (NTIS), see the two pages that follow.

The following are issued as monthly and annual bulletins:

( ) FF *Frozen Fishery Products*
( ) FM *Fish Meal and Oil*

The following, with one exception, are issued annually:

( ) MF-1 *Canned Fishery Products*
( ) MF-2 *Industrial Fishery Products*
( ) MF-3 *U.S. Production of Fish Fillets and Steaks*
( ) MF-4 *Processed Fishery Products*
( ) MF-5 *Fish Sticks, Fish Portions, and Breaded Shrimp (Quarterly and Annually)*
( ) MF-6 *Imports and Exports of Fishery Products*

LIBRARY INFORMATION

Library information is available from NOAA's Georgetown Information Center (D8222), Page Building 2, Room 193, 3300 Whitehaven Street, NW., Washington, D C 20235. Telephone 202-634-7346.

PUBLICATIONS

PUBLICATIONS AVAILABLE FROM NATIONAL TECHNICAL INFORMATION SERVICE, U.S. DEPARTMENT OF COMMERCE

HOW TO ORDER

To purchase the reports listed on this page, call 703-557-4650 or write:

NTIS
ATTN: Order Desk
5282 Port Royal Road
Springfield, VA 22161

Rush order service (24 hours) is available at an extra charge. Call 703-557-4700. Customer must have approved credit card or an account with NTIS. Other services include NTISearches, Telex, Telecopier, 3M Facsimile, and after hours and holiday recording services.

PRICES

Prices of publications are subject to change. Contact NTIS for price quotations.

RECREATIONAL MARINE FISHING

1970 Salt-Water Angling Survey, PB-265-416.

Determination of the Number of Commercial and Non-Commercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

Participation in Marine Recreational Fishing, Northeastern United States, 1973-74, COM-75-10655.

Pariticipation in Marine Recreational Fishing, Southeastern United States, 1974, PB-273-160.

COMMERCIAL FISHERIES

Fisheries of the United States is a preliminary report with historical comparisons on the Nation's fishing, fish processing, and foreign trade in fishery products.

Year	Accession number	Year	Accession number
1966	COM-75-10662	1972	COM-73-50644
1967	COM-75-10663	1973	COM-74-50546
1968	COM-75-10664	1974	COM-75-10862
1969	COM-75-10665	1975	PB-25-3966
1970	COM-71-50081	1976	PB-268-662
1971	COM-75-10666	1977	PB-282-741

Fishery Statistics of the United States (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than Fisheries of the United States.

Year	Accession number	Year	Accession number
1939	COM-75-11265	1957	COM-75-11060
1940	COM-75-11266	1958	COM-75-11061
1941	COM-75-11267	1959	COM-75-11062
1942	COM-75-11268	1960	COM-75-11063
1943	COM-75-11269	1961	COM-75-11064
1944	COM-75-11270	1962	COM-75-11065
1945	COM-75-11271	1963	COM-75-11066
1946	COM-75-11272	1964	COM-75-11067
1947	COM-75-11273	1965	COM-75-11068
1948	COM-75-11274	1966	PB-246-429
1949	COM-75-11275	1967	PB-246-430
1950	COM-75-11056	1968	COM-72-50249
1951	COM-75-11053	1969	COM-75-10887
1952	COM-75-11054	1970	COM-75-10643
1953	COM-75-11055	1971	COM-74-51227
1954	COM-75-11057	1972	COM-75-11430
1955	COM-75-11058	1973	PB-262-058
1956	COM-75-11059	1974	PB-277-796

Processors of Fishery Products in U.S., 1977, (shows firm name, address, and major products), PB-289-616.

Wholesale Dealers of Fishery Products in U.S., 1977, (shows firm name, address and major products), PB-289-576.

Maine Landings, 1946-1976, PB-271-296.
Massachusetts Landings, 1943-1976, PB-275-866.
Rhode Island Landings, 1954-1977, PB-287-627.
New York Landings, 1954-1976, PB-275-449.
New Jersey Landings, 1952-1976, PB-275-696.
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The following statistical reports, known as Bas Economic Indicators, present demand indicators a projections, U.S. production, employment, fishi effort, biological stock assessment, U.S. trade, a other economic indicators.

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The following reports are not part of a speci series.

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RCIC Regions

Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1978, to March 31, 1979

The following listing is a summary of fishing policy and regulations that appeared in the Federal Register. Throughout the entire listing of Federal Register notices, the following acronyms will be used:

EIS - Environmental Impact Statement
FEIS - Final Environmental Impact Statement
FMP - Fishery Management Plan
PMP - Preliminary Fishery Management Plan
OY - Optimum Yield
TALFF - Total Allowable Level of Foreign Fishing
U.S. FCZ - U.S. Fishery Conservation Zone

43 FR 21 (January 3, 1978) - Proposed regulations for surf clam fishing; request for comments (see 43 FR 6952, 7208, 19397).

43 FR 777 (January 4, 1978) - Corrections to emergency regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 42 FR 42243, 65186, 43 FR 783, 6094, 8282, 8283, 9515, 13087).

43 FR 783 (January 4, 1978) - Notice of availability of draft EIS for amendments to the FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 777, 6094, 8283, 9515, 13087).

43 FR 870 (January 4, 1978) - Final rule establishing procedural regulations governing interagency consultation under Section 7 of the Endangered Species Act of 1973 (see 42 FR 4873).

43 FR 1093 (January 6, 1978) - Final rule that Panama is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to fishing operations.

43 FR 1460 (January 9, 1978) - Proposed rules on funding of Fishery Management Councils, compliance with the National Environmental Policy Act, and confidentiality of statistics submitted pursuant to a fishery management plan.

43 FR 1627 (January 11, 1978) - Corrections to 42 FR 64548 and 42 FR 64551.

43 FR 2726 (January 19, 1978) - Corrections to 42 FR 60682.

43 FR 3292 (January 24, 1978) - Proposed amendments to regulations for foreign fishing for Atlantic billfishes and sharks (see 42 FR 57716, 43 FR 3420, 3818, 11824, 32840).

43 FR 3420 (January 25, 1978) - Proposed amendments to foreign fee schedule; adds Atlantic and Pacific sharks (except dogfish) and certain species of Pacific billfish, and exvessel prices for each (see 42 FR 30529, 54588, 43 FR 3292, 3420, 11824, 19232, 32840).

43 FR 3566 (January 26, 1978) - Final rule that Bermuda is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to fishing operations.

43 FR 3566 (January 26, 1978) - Final amendment to foreign fishing regulations; provides U.S. fishermen additional method for seeking redress when fixed gear is damaged as a result of activities by foreign fishermen (see 42 FR 61471, 62926).

43 FR 3601 (January 26, 1978) - Announcement of public hearing to receive comments on proposed regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 42 FR 29876, 65186).

43 FR 3818 (January 27, 1978) - Issuance of PMP for Atlantic Billfishes and Sharks (see 42 FR 57716, 43 FR 3292, 3420, 11824, 19232, 32840, 35736).

43 FR 3921 (January 30, 1978) - Withdrawal of proposed regulations regarding taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes (see 42 FR 60185, 43 FR 9172, 9481, 22213, 38609, 43025).

43 FR 4029 (January 31, 1978) - Emergency amendments to regulations; restricts fishing for surf clams to 2 days per week (see 42 FR 59948, 65187, 43 FR 21, 6952, 7208, 8283, 19397, 27549).

43 FR 5398 (February 8, 1978) - Interim policy on consideration of applications for foreign vessels to purchase fish from U.S. vessels (see 42 FR 30875).

43 FR 5519 (February 9, 1978) - Regulations for wildlife research on the Pribilof Islands.

43 FR 5521 (February 9, 1978) - Final rule on publication of regulations regarding taking of marine mammals incidental to commercial fishing operations for yellowfin tuna; exemption of Costa Rica from importation prohibition.

43 FR 6094 (February 13, 1978) - Extension emergency regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) to March 31, 1978 (see 42 FR 65186, 43 FR 777, 783, 8282, 8283, 9515, 13087).

43 FR 6952 (February 17, 1978) - Final regulations on surf clam fishing (see 42 FR 59948, 43 FR 21, 4029, 7208, 8283, 10426, 19396, 27549, 39161, 40527, 42765, 46033, 46880, 50442, 54638, 59388, 44 FR 11071, 11072).

43 FR 7208 (February 21, 1978) - Emergency amendment to surf clam regulations; reduction of fishing time (see 42 FR 59948, 43 FR 21, 4029, 6952, 8283, 19397, 27549).

43 FR 8282 (March 1, 1978) - Closure of the directed commercial fishery for cod on Georges Bank and in Southern New England waters (see 42 FR 29877, 65186, 43 FR 777, 783, 6094, 8283, 9515, 13087).

43 FR 8282 (March 1, 1978) - Closure of the directed commercial fishery for cod in the Gulf of Maine (see 42 FR 65186, 43 FR 777, 783, 6094, 9515, 13087).

43 FR 8283 (March 1, 1978) - Reminder that during March, April, and May certain areas off Cape Cod and Georges Bank are closed to bottom trawling under FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) (see 42 FR 29876, 65186, 43 FR 777, 783, 6094, 8282, 9515, 13087).

43 FR 8283 (March 1, 1978) - Announcement of public hearings to determine the procedure by which surf clam vessel owners or operators may change fishing days (see 42 FR 59948, 43 FR 21, 4029, 6592, 7208, 10426, 13581, 19396, 27549, 46033).

43 FR 8554 (March 2, 1978) - Final rule and correction of yellowfin tuna and tuna import restrictions (see 42 FR 30373).

(Continued)

Certain Rules and Regulations Published by NMFS in the Federal Register (FR), by Volume, Page Number, and Date, January 1, 1978, to March 31, 1979 - Continued

43 FR 9172 (March 6, 1978) - Taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes; proposed rule (see 42 FR 60185, 43 FR 3921, 9481, 13883, 22213, 38609, 43025).

43 FR 9481 (March 8, 1978) - Final rule on the current Schedule of the International Whaling Convention, including latest amendments which sets limits on the native (Indian, Aleut, or Eskimo) subsistence harvest of bowhead whales during 1978 (see 43 FR 3921, 9172, 13883, 22213, 38609, 43025).

43 FR 9515 (March 8, 1978) - Correction of 43 FR 8282 (Gulf of Maine cod fishery) (see 42 FR 42243, 65186; 43 FR 777, 783, 6094, 8282, 8383, 13087).

43 FR 9632 (March 9, 1978) - Prohibition of taking of rough-toothed dolphin incidental to commercial fishing operations.

43 FR 10426 (March 13, 1978) - FEIS for the FMP for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California, commencing in 1978 (see 42 FR 6875, 43 FR 15629, 18219, 21681, 27993, 29791).

43 FR 10426 (March 13, 1978) - Closure of the surf clam fishery (see 43 FR 6952).

43 FR 10566 (March 14, 1978) - Final regulations on foreign fishing for snow (tanner) crabs in the Bering Sea (see 42 FR 44569, 60682 and 43 FR 21170, 29127, 52034, 54964, 57149, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 10592 (March 14, 1978) - Rulemaking proposed to amend regulations on fishing for Atlantic bluefin tuna (see 42 FR 30373, 31824, 49836, 43 FR 26581, 27547, 28502, 29787, 39107).

43 FR 10933 (March 16, 1978) - Interim rule amending foreign fishing regulations to provide additional protection for U.S. fixed gear fishermen (see 42 FR 8813).

43 FR 11246 (March 17, 1978) - Closure of cod fishery in Gulf of Maine; closure of haddock fishery (see 42 FR 65186).

43 FR 11824 (March 22, 1978) - Final rule that amends the foreign fishing regulations for billfishes and sharks in the U.S. FCZ in Atlantic Ocean, Gulf of Mexico, and Caribbean Sea (see 42 FR 57716, 43 FR 3292, 3420, 3818, 11824, 19232, 32840).

43 FR 12735 (March 27, 1978) - Proposed regulations to list green, loggerhead, and Pacific ridley turtles as threatened; reopening of comment period (see 43 FR 13906, 32800, 34839).

43 FR 13087 (March 29, 1978) - Notice of availability of supplement to FEIS for FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) (see 42 FR 13988, 21784, 29876, 42243, 65168, 43 FR 777, 783, 6094, 8282, 8283, 9515, 13578).

43 FR 13578 (March 31, 1978) - Interim emergency regulations and request for comments for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 42 FR 13998, 42243, 58412, 63892, 65186; 43 FR 777, 6094, 8282, 8283, 13087, 13601, 14968, 17361, 17388, 19060, 19233, 20505, 21339, 28503, 31015, 31341, 45872).

43 FR 13581 (March 31, 1978) - Amendment to surf clam regulations for 1978 (see 42 FR 59948, 43 FR 21, 4029, 6952, 7208, 8283, 10426, 19396, 27549, 46033).

43 FR 13601 (March 31, 1978) - Approval of amendment to FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 20531, 21339, 31341).

43 FR 13883 (April 3, 1978) - Final rule on the taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes (see 42 FR 60185; 43 FR 3921, 9172, 9481, 22213, 38609, 43025, 43309, 47528).

43 FR 13906 (April 3, 1978) - Correction to 43 FR 12735 (see 43 FR 32800, 34839).

43 FR 14968 (April 10, 1978) - Interim emergency amendment to regulations and request for comments for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 17361, 17388, 19060, 19233, 20505, 21339, 28503, 31015).

43 FR 15430 (April 13, 1978) - Amendment of foreign fishing regulations for 1978 (see 42 FR 60682, 43 FR 39586).

43 FR 15629 (April 14, 1978) - Interim emergency regulations and request for comments on proposed final rulemaking for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 42 FR 6875 and 43 FR 10426, 18219, 21681, 22214, 27993, 29791).

43 FR 16783 (April 20, 1978) - Proposed amendments to U.S. yellowfin tuna regulations; request for comments (see 42 FR 24742, 39394, 41128, 43 FR 29788).

43 FR 17013 (April 21, 1978) - Proposed amendments to foreign fishing regulations for Gulf of Alaska trawl fishery and sablefish (black cod) fishery (see 42 FR 60682, 43 FR 17242, 27547, 27550, 34825, 46349).

43 FR 17242 (April 21, 1978) - The FMP for Groundfish of the Gulf of Alaska during 1978, and proposed regulations for domestic fishing to implement the Plan; the FMP supersedes the PMP for Trawl Fishery the Gulf of Alaska, as amended, and that portion of the PMP for Sablefish of the Bering Sea and Northeastern Pacific Ocean, as amended, applicable to the Gulf of Alaska (see 42 FR 60682, 43 FR 17013, 27549, 27550, 34825, 46349, 47222, 52709, 56238).

43 FR 17361 (April 24, 1978) - Interim emergency amendment to regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 14968, 19060, 19233, 20505, 27548, 28503, 31015).

43 FR 17388 (April 24, 1978) - Notice of approval of an amendment to the FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) that revises landing restrictions for cod and haddock taken with trawl nets (see 43 FR 13578, 14968, 17361, 19060, 19233, 45872).

43 FR 18219 (April 28, 1978) - Supplemental notice of proposed rulemaking for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 42 FR 6875, 37558, 43 FR 10426, 15629, 21681, 23748, 27993, 29791).

43 FR 18382 (April 28, 1978) - Foreign fishing allocations by nation for 1978 (see 42 FR 60681).

43 FR 19060 (May 3, 1978) - Revision of quarterly quotas for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13579, 17361, 17388, 19233, 19429).

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43 FR 19232 (May 4, 1978) - Amendment to foreign fishing regulations; amendment of foreign fishing fee schedule and codification of regulations (see 43 FR 3292, 3420, 3818, 11824, 32840).

43 FR 19233 (May 4, 1978) - Interim emergency regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) and request for comments; correction of regulations (see 43 FR 13578, 14968, 17361, 17388, 19060, 19429, 27548).

43 FR 19257 (May 4, 1978) - Licensing procedures for U.S. vessels desiring to fish in Mexican waters.

43 FR 19258 (May 4, 1978) - Closure of yellowfin tuna fishing season (see 42 FR 30373, 43 FR 8554).

43 FR 19396 (May 5, 1978) - Correction to 43 FR 13581.

43 FR 19397 (May 5, 1978) - Notice of reduction of fishing hours for surf clams (see 43 FR 21, 4029, 6962, 7208, 8283).

43 FR 19429 (May 5, 1978) - New landing restrictions for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 14968, 17361, 17388, 19060, 19233, 27548, 45872).

43 FR 20027 (May 10, 1978) - Notice of extension of comment period on proposed amendments to regulations on fishing for Atlantic bluefin tuna (see 43 FR 10592).

43 FR 20255 (May 11, 1978) - Proposed regulations to govern Section 10 of the Fishermen's Protective Act of 1967 for compensation for damage caused by foreign vessels in the U.S. FCZ (see 43 FR 45869, 44 FR 8905).

43 FR 20505 (May 12, 1978) - Emergency regulations repromulgated for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 14968, 17361, 27548, 28503, 31015).

43 FR 20519 (May 12, 1978) - Notice of public hearing to receive comments on the FMP and proposed regulations for the Atlantic herring fishery (see 43 FR 23747, 24885).

43 FR 20531 (May 12, 1978) - Notice of public hearing and availability of draft supplement to FEIS for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 23747, 31341).

43 FR 20532 (May 12, 1978) - Policy statement on U.S./foreign ventures within U.S. FCZ (see 42 FR 30875 and 43 FR 5398).

43 FR 21170 (May 16, 1978) - Proposed regulations and FMP for Commercial Tanner Crab off the Coast of Alaska; comments requested (see 43 FR 10566, 29127, 52034, 54964, 57149, 59075, 44 FR 1115, 5168, 15503, 18551).

43 FR 21339 (May 17, 1978) - Proposed regulations to amend existing regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) fisheries for cod and haddock establishing annual allocations for each size class of vessel or gear type of vessel (see 43 FR 13578, 13601, 20531, 31341, 32427).

43 FR 21681 (May 19, 1978) - Final rule on correction of regulations for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 43 FR 10426, 15629, 18219, 22214, 27993, 29791).

43 FR 22213 (May 24, 1978) - Final rule on village-by-village allocation of bowhead whales that may be taken by native (Indian, Aleut, or Eskimo) subsistence whalers during 1978 (see 43 FR 9481, 13883, 38609, 43025, 43309, 47528).

43 FR 22214 (May 24, 1978) - Emergency regulations repromulgated for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 43 FR 10426, 15629, 18219, 21681, 27993, 29791).

43 FR 23747 (June 1, 1978) - Amendment to public hearing notice on Atlantic groundfish (cod, haddock, and yellowtail flounder); management plan will include discussion on draft FMP for Atlantic sea herring (see 43 FR 20519, 20531, 24885).

43 FR 23748 (June 1, 1978) - Correction to 43 FR 18219.

43 FR 24885 (June 8, 1978) - Notice of public hearing on draft EIS for Atlantic sea herring FMP (see 43 FR 20519, 23747).

43 FR 25349 (June 12, 1978) - Notice of public hearing to solicit information and comments for need for regulations to control activities in areas of special significance for humpback whales in Hawaii (see 44 FR 1113).

43 FR 26581 (June 21, 1978) - Final rule that amends regulations on fishing for Atlantic bluefin tuna (see 42 FR 30373, 43 FR 10592, 27547, 28502, 29787, 39107, 41044).

43 FR 27547 (June 26, 1978) - Final rule on the closure of purse seine fishing for Atlantic bluefin tuna for 1978 (see 43 FR 26581, 28502, 29787, 39107, 41044).

43 FR 27547 (June 26, 1978) - Amendment to foreign fishing regulations for Gulf of Alaska trawl fishery and longlining for sablefish; gear conflict prevention between the United States and foreign countries (see 43 FR 17013, 17242, 27550, 30065).

43 FR 27548 (June 26, 1978) - Additional landings restrictions for Atlantic groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 14968, 17361, 17388, 19233, 19429, 20505, 28503, 31015).

43 FR 27549 (June 26, 1978) - Notice of extension of 24-hour fishing period rule for surf clams (see 43 FR 21, 4029, 6952, 7208, 8283, 10426, 13581, 19396, 46033).

43 FR 27549 (June 26, 1978) - Amendment to PMP for the Sablefish Fishery of the Eastern Bering Sea and Northeastern Pacific; to prevent gear conflicts between U.S. longline vessels and foreign nations (see 42 FR 8534, 60682, 43 FR 17243).

43 FR 27550 (June 26, 1978) - Amendment to the PMP for the Trawl Fishery of the Gulf of Alaska (42 FR 8782); to prevent damage to fixed gear of U.S. vessels (see 42 FR 60682, 43 FR 17013, 17242, 27547).

43 FR 27993 (June 28, 1978) - Reaffirmation of boundary at Cape Falcon, Oregon, for management areas for commercial and recreational salmon fisheries off the coasts of Washington, Oregon, and California (see 42 FR 6875, 37558, 43 FR 10426, 15629, 18219, 21681, 22214, 29791).

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43 FR 28502 (June 30, 1978) - Notice of prohibition of take of northern stock of common dolphin incidental to commercial fishing operations; 1978 quota exceeded.

43 FR 28502 (June 30, 1978) - Amendment to regulations regarding fishing for Atlantic bluefin tuna; reopens purse seine fishing season for school-size Atlantic bluefin tuna until remaining portion of quota is reached (see 42 FR 30373, 31824, 49836, 43 FR 10592, 26581, 27547, 29787, 39107, 41044).

43 FR 28503 (June 30, 1978) - Final regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) for 1978 (see 43 FR 13578, 14968, 17361, 20505, 27548, 31015, 45872).

43 FR 29127 (July 6, 1978) - Interim final amendment to regulations for foreign fishing for snow (tanner) crabs in the Bering Sea; extends foreign fishing area (see 43 FR 10566, 21170, 52034, 54964, 57149, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 29787 (July 11, 1978) - Final rule on amendment to regulations regarding fishing for Atlantic bluefin tuna; recloses purse seine fishing season for school-size Atlantic bluefin tuna (see 43 FR 10592, 26581, 27547, 28502, 39107, 41044).

43 FR 29788 (July 11, 1978) - Amendments to U.S. yellowfin tuna regulations; small vessel allocations, changes in radio reporting frequencies, establishes new experimental fishing area within regulatory area, new inspection procedures for 1978 (see 43 FR 16783).

43 FR 29791 (July 11, 1978) - Final regulations implementing the FMP for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California for 1978 (see 43 FR 10426, 15629, 18219, 21681, 22214, 27993).

43 FR 29949 (July 12, 1978) - Amendment of foreign fishing regulations for 1978; modification of off-bottom trawls in foreign off-bottom fishery.

43 FR 30065 (July 13, 1978) - Corrections to amendment to foreign fishing regulations (see 43 FR 27547).

43 FR 31015 (July 19, 1978) - Emergency regulatory actions and proposed rulemaking implementing FMP amendments for Atlantic Groundfish (cod, haddock, and yellowtail flounder) (see 43 FR 13578, 14968, 17361, 17388, 20505, 27548, 28503, 39108, 42764, 45872).

43 FR 31145 (July 20, 1978) - Final rule that Venezuela is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to yellowfin tuna purse seine fishing operations; exempts yellowfin tuna caught by Venezuela-flag vessels from importation prohibition.

43 FR 31183 (July 20, 1978) - Proposed amendment to 1978 foreign fishing regulations, increasing allocations of short-finned squid by 5,500 metric tons and silver hake by 5,000 metric tons, and listing TALFF's for 1978; comments solicited (see 42 FR 9596, 39106, 41430, 44569, 43 FR 31186 (squid); 42 FR 10146, 39131, 44569, 60945, 43 FR 31185 (hake)).

43 FR 31185 (July 20, 1978) - Amendment to PMP for Hake Fisheries in the Northwestern Atlantic (see 42 FR 10146, 39131, 44569, 60945, 43 FR 31183).

43 FR 31186 (July 20, 1978) - Amendment to PMP for the Squid Fisheries of the Northwestern Atlantic (see 42 FR 9596, 39106, 41430, 44569, 43 FR 31183, 35719, 55809, 59845).

43 FR 31191 (July 20, 1978) - Approval of FMP for Northern Anchovy Fishery; harvest quotas for 1978-79 season (see 43 FR 31652, 40868, 44 FR 17199).

43 FR 31341 (July 21, 1978) - Promulgation of final regulations to amend existing regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) fisheries for cod and haddock, establishing vessel class allocations and weekly catch limitations (see 43 FR 13578, 13601, 20531, 21339, 32427, 41405, 45872).

43 FR 31652 (July 21, 1978) - Solicitation of public comments on proposed regulations implementing the FMP for the Northern Anchovy Fishery (see 43 FR 31191).

43 FR 31374 (July 21, 1978) - Proposed regulations and proposed amendments to foreign fishing regulations for billfishes and sharks in the Pacific Ocean; comments solicited (see 42 FR 37584, 43 FR 41062).

43 FR 32427 (July 27, 1978) - Notice of closure of cod fishery in Gulf of Maine for certain classes of vessels; have reached annual allocation (see 42 FR 65186, 43 FR 11246, 21339, 31341, 41405).

43 FR 32800 (July 28, 1978) - Final rule that the loggerhead sea turtle is a threatened species; green sea turtle and olive (Pacific) ridley sea turtles are threatened species, except that some populations are endangered. Regulations for the protection of threatened species of sea turtles (see 43 FR 12735, 13906, 34839, 45905, 54639, 57417).

43 FR 32840 (July 28, 1978) - Notice of public hearings on proposed amendment to FEIS/PMP for Atlantic Billfishes and Sharks (see 43 FR 3818, 35736).

43 FR 33776 (August 1, 1978) - Proposed 1979 fee schedule for foreign fishing; request for comments (see 43 FR 57148, 59507).

43 FR 34510 (August 4, 1978) - Proposed amendment to PMP for Trawl Fishery of California, Oregon, and Washington, raising TALFF for Pacific hake by 31,000 metric tons and incidentally caught species (see 42 FR 8578, 60682, 60945, 43 FR 35924).

43 FR 34825 (August 7, 1978) - Approval of FMP for Groundfish of the Gulf of Alaska; proposed regulations (see 43 FR 17013, 17242, 46349).

43 FR 34839 (August 7, 1978) - EPA notice of receipt of EIS listing three sea turtles as threatened species, July 26, 1978 (see 43 FR 12735, 13906, 32800).

43 FR 35719 (August 11, 1978) - Amendment to final regulations for short-finned squid and silver hake as proposed in 43 FR 31183 (see 43 FR 31185, 31186, 55809, 59845).

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43 FR 35736 (August 11, 1978) - Correction to 43 FR 32840 (see 43 FR 38448).

43 FR 35924 (August 14, 1978) - Amendment to regulations for PMP for Trawl Fishery of California, Oregon, and Washington; amends TALFF for Pacific hake as proposed in 43 FR 34510.

43 FR 36263 (August 16, 1978) - Determination that New Zealand is in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to yellowfin tuna purse seine fishing operations; exempts yellowfin tuna caught by New Zealand-flag vessels from importation prohibition.

43 FR 38448 (August 28, 1978) - Correction to 43 FR 35736.

43 FR 38609 (August 29, 1978) - Proposed amendment increasing by two the 1978 allocation of bowhead whales that may be taken by native (Indian, Aleut, or Eskimo) subsistence whalers (see 43 FR 13883, 22213, 43025, 43309, 47528).

43 FR 39107 (September 1, 1978) - Regulation allowing use of "buy boats" to purchase Atlantic bluefin tuna from fishermen at sea (see 43 FR 10592, 26581).

43 FR 39108 (September 1, 1978) - Extension of emergency regulations for Atlantic groundfish (cod, haddock, yellowtail flounder) for 45 days (see 43 FR 31015, 42764, 45872).

43 FR 39161 (September 1, 1978) - Notice of public hearing to solicit comments on extending Atlantic surf clam fishery vessel moratorium (see 43 FR 6952).

43 FR 39586 (September 6, 1978) - Clarification of amendment to foreign fishing regulations to authorize a directed hook-and-line fishery for Pacific cod (see 43 FR 15430).

43 FR 40527 (September 12, 1978) - Amendment to regulations adjusting downward the catch quota for Atlantic surf clams (see 43 FR 6952).

43 FR 40868 (September 13, 1978) - Promulgation of regulations for FMP for Northern Anchovy Fishery (see 43 FR 31191, 44 FR 17199).

43 FR 41044 (September 14, 1978) - Final rule on the closure of Atlantic bluefin tuna fishing with gear other than purse seines; 1978 quota reached (see 43 FR 26581, 27547, 28502, 29787, 39107).

43 FR 41062 (September 14, 1978) - Notice of withdrawal of PMP for Pacific Billfish and Oceanic Sharks (see 43 FR 31374).

43 FR 41405 (September 18, 1978) - Notice of closure of commercial cod fishing in southern New England (including Georges Bank) for certain classes of vessels; have reached annual allocation (see 43 FR 31341, 32427).

43 FR 42764 (September 21, 1978) - Amendment to emergency regulations for FMP for Atlantic Groundfish (cod, haddock, yellowtail flounder) fishery for yellowtail flounder; revised landings restrictions (see 43 FR 31015, 39108, 42764).

43 FR 42765 (September 21, 1978) - Final rule on the closure of area of the U.S. FCZ offshore of Atlantic City, New Jersey, to surf clam fishing because of presence of small clams (see 43 FR 6952).

43 FR 43025 (September 22, 1978) - Final rule on the increase by two of 1978 allocation of bowhead whales that may be taken by native (Indian, Aleut, or Eskimo) subsistence whalers (see 43 FR 13883, 22213, 38609, 43309, 47528).

43 FR 43309 (September 25, 1978) - Final rule on the amendment to Schedule of the International Convention for the Regulation of Whaling, 1946 (see 43 FR 13883, 22213, 38609, 43025, 47528).

43 FR 43461 (September 26, 1978) - Amendment to foreign fishing regulations under the Trawl Fishery of the Gulf of Alaska PMP to increase TALFF for Pacific cod by 8,120 metric tons, flounder by 6,700 metric tons, sablefish by 2,200 metric tons, and squid by 300 metric tons (see 42 FR 8782, 8800, 60945, 43 FR 17242, 51637).

43 FR 44857 (September 29, 1978) - Amendment of regulations under Fishermen's Protective Act establishing fees for agreement year October 1, 1978, through September 30, 1979.

43 FR 45628 (October 3, 1978) - Coordination of interagency review of status of certain populations of Pacific salmon and steelhead trout occurring in upper Columbia River Basin to determine if any should be proposed for listing as threatened or endangered under the Endangered Species Act of 1973.

43 FR 45869 (October 4, 1978) - Final regulations to govern Section 10 of the Fishermen's Protective Act of 1967 for compensation for damage caused by foreign vessels in the U.S. FCZ (see 43 FR 20255, 44 FR 8905).

43 FR 45872 (October 4, 1978) - Approval of FMP amendments for Atlantic Groundfish (cod, haddock, and yellowtail flounder) promulgated as emergency regulations change to fishing year beginning October 1 for regulatory purposes (see 43 FR 13578, 17388, 19429, 28503, 31015, 31341, 39108, 42764, 52252, 53040, 55411, 58570, 44 FR 885, 2397).

43 FR 45905 (October 4, 1978) - Proposed designation of critical habitat for Kemp's ridley and loggerhead sea turtles (see 43 FR 32800, 48669, 54639, 57147).

43 FR 46033 (October 5, 1978) - Amendment to surf clam regulations to increase fishing time and reallocation of quota (see 43 FR 6952, 8283, 10426, 13581, 19396, 27549, 39161, 40527, 42765, 50442).

43 FR 46054 (October 5, 1978) - Proposed amendment to foreign fishing regulations under PMP for Trawl Fisheries and Herring Gillnet Fishery of Eastern Bering Sea and Northeast Pacific revising TALFF for Pacific cod and sablefish in Bering Sea (see 42 FR 9298, 60945, 43 FR 50441, 50473, 54636, 58190).

43 FR 46349 (October 6, 1978) - Approval of amendment to FMP for Groundfish of the Gulf of Alaska; proposed regulations (see 43 FR 17013, 17242, 27549, 27550, 34825, 50475, 56238, 59322, 44 FR 4684, 18028, 18539).

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43 FR 46880 (October 11, 1978) - Proposed amendment to regulations extending present moratorium on entry of additional vessels into surf clam fishery for 1-year period (see 43 FR 6952, 54638).

43 FR 46975 (October 12, 1978) - Prohibition of take incidental to commercial fishing operations in 1978 of northern stock of striped dolphin; 1978 quota exceeded.

43 FR 47222 (October 13, 1978) - Approval of amendment to FMP for Groundfish in the Gulf of Alaska permitting foreign longline fishermen to take entire Chirikof TALFF (and any allocated reserves) for Pacific cod in that portion of Chirikof subarea west of 175 degrees longitude (see 43 FR 17242, 52709, 56238).

43 FR 47528 (October 16, 1978) - Final rule on recent amendments to Schedule of the International Whaling Convention for Regulation of Whaling (see 43 FR 13883, 22213, 38609, 43025, 43309).

43 FR 48669 (October 19, 1978) - Corrections to 43 FR 45905.

43 FR 49023 (October 20, 1978) - Proposed amendments to regulations to require FMPs to contain certain information that is required by Public Law 95-354, an amendment to the Fishery Conservation and Management Act of 1976 (see 44 FR 7708).

43 FR 49032 (October 20, 1978) - Solicitation of public comments on preliminary determination of consistency of 1978 foreign fishing permits to receive U.S. harvested Gulf of Alaska pollock and Pacific hake.

43 FR 50441 (October 30, 1978) - Amendment to foreign fishing regulations; revises TALFF for Pacific cod and sablefish in the Bering Sea under PMP for Trawl Fisheries and Herring Gillnet Fishery of Eastern Bering Sea and Northeast Pacific (see 42 FR 9298, 60945, 43 FR 46054, 50473, 54636, 58190).

43 FR 50442 (October 30, 1978) - Notice of reduction of fishing time in surf clam fishery (see 43 FR 6952, 7208, 8283, 10426, 19396, 27549, 39161, 40527, 42765, 46033, 50442).

43 FR 50442 (October 30, 1978) - Notice of surf clam quota increase for fourth quarter of 1978 (see 43 FR 6952, 54252, 59388, 44 FR 11072).

43 FR 50473 (October 30, 1978) - Proposed amendment to foreign fishing regulations; increase of OY and incremental apportionment of TALFF of PMP for Trawl Fisheries and Herring Gillnet Fishery of Eastern Bering Sea and Northeast Pacific (see 42 FR 9298, 60945, 43 FR 46054, 50441, 54636, 58190).

43 FR 50475 (October 30, 1978) - Correction to 43 FR 46349.

43 FR 50928 (November 1, 1978) - Proposed amendment to 1979 foreign fishing fee schedule; creation of Fishing Vessel and Gear Damage Compensation Fund by imposition of 20-percent surcharge on all foreign fishing fees (see 43 FR 33776, 57148, 59507).

43 FR 51053 (November 2, 1978) - Proposed regulations governing foreign fishing activities within U.S. FCZ relating to United States in 1979 and subsequent years; changes in reporting procedures, new code list for marine mammals (see 43 FR 58104, 59292, 60930, 44 FR 6761).

43 FR 51637 (November 6, 1978) - Amendment to PMP for Trawl Fishery of the Gulf of Alaska releasing to foreign fishermen a portion of reserve of certain species. Foreign fishing regulations amended to increase TALFF for those species (see 42 FR 8782, 8800, 60945, 43 FR 17242, 43461).

43 FR 52034 (November 8, 1978) - Proposed amendment to FMP for Commercial Tanner Crab off the Coast of Alaska to extend effective date to October 31, 1979 (see 43 FR 10566, 21170, 29127, 54964, 57149, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 52252 (November 9, 1978) - Notice of closure of commercial cod and haddock fisheries in Gulf of Maine and Georges Bank areas for certain classes of vessels (see 43 FR 45872, 53040, 58570).

43 FR 52709 (November 14, 1978) - Final regulations implementing FMP for Groundfish of the Gulf of Alaska (see 43 FR 17242, 47222, 56238).

43 FR 53040 (November 15, 1978) - Emergency regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) fishery; correction to 43 FR 52252 (see 43 FR 45872, 55411, 58570, 44 FR 885, 2397).

43 FR 54252 (November 21, 1978) - Clarification of surf clam quota adjustment (see 43 FR 50442, 59388, 44 FR 11072).

43 FR 54636 (November 22, 1978) - Amendment to foreign fishing regulations; increase of OY and incremental apportionment of TALFF allocated by PMP for Trawl Fisheries and Herring Gillnet Fishery of Eastern Bering Sea and Northeastern Pacific (see 42 FR 9298, 60945, 43 FR 46054, 50441, 50473, 58190).

43 FR 54638 (November 22, 1978) - Continuation of surf clam vessel moratorium for 1 year (see 43 FR 6952, 46880).

43 FR 54639 (November 22, 1978) - Promulgation of temporary emergency regulations designating Port Canaveral Navigation Channel, Cape Canaveral, Fla., as restricted fishing area; critical habitat for endangered and threatened species of sea turtles (see 43 FR 32800, 45905, 56044, 57147).

43 FR 54964 (November 24, 1978) - Proposed regulations for foreign fishing for tanner crabs off Alaska (see 43 FR 10566, 21170, 29127, 52034, 57149, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 55411 (November 28, 1978) - Correction to 43 FR 53040.

43 FR 55806 (November 29, 1978) - Proposed designation of critical habitat for leatherback turtle in waters adjacent to Sandy Point Beach, St. Croix, U.S. Virgin Islands (see 44 FR 17710).

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43 FR 55809 (November 29, 1978) - Proposed amendment to PMP for Squid Fisheries of the Northwestern Atlantic (see 43 FR 31183, 31186, 35719, 59845).

43 FR 56044 (November 30, 1978) - Correction to 43 FR 54639.

43 FR 56238 (December 1, 1978) - Final regulations implementing two amendments to FMP for Groundfish of the Gulf of Alaska (see 43 FR 17242, 46349, 47222, 52709, 44 FR 4684, 18028, 18539).

43 FR 57147 (December 6, 1978) - Amendment to temporary emergency regulations designating Port Canaveral Navigation Channel a restricted fishing area (see 43 FR 32800, 45905, 54639, 56044).

43 FR 57148 (December 6, 1978) - Fee schedule for 1979 for foreign fishing; amends fee schedule for 1978 (see 42 FR 54588, 43 FR 19232, 33776, 50929, 59507, 60171).

43 FR 57149 (December 6, 1978) - Final regulation and implementation of FMP for tanner crab fishing off Alaska (see 43 FR 10566, 21170, 29127, 52034, 54964, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 58104 (December 12, 1978) - Extension of comment period for proposed foreign fishing regulations (see 43 FR 51053, 59292).

43 FR 58190 (December 13, 1978) - Final regulation that increases OY and incremental TALFF allocated by PMP for Trawl Fisheries and Herring Gillnet Fishery of Eastern Bering Sea and Northeastern Pacific (see 42 FR 9298, 60945, 43 FR 46054, 50441, 50473, 54636).

43 FR 58570 (December 15, 1978) - Notice of closures for Atlantic groundfish (cod, haddock, and yellowtail flounder) fishery (see 43 FR 45872, 52252, 53040).

43 FR 59075 (December 19, 1978) - Final regulations applicable to foreign vessels fishing for tanner crabs off Alaska (see 43 FR 10566, 21170, 29127, 52034, 54964, 57149, 44 FR 1115, 5168, 5885, 15503, 18511).

43 FR 59292 (December 19, 1978) - Final regulations governing foreign fishing in the U.S. FCZ for 1979 (see 43 FR 51530, 60930, 44 FR 6761, 15726, 17184).

43 FR 59388 (December 20, 1978) - Notice of closure of surf clam fishery; fourth quarter quota exceeded for 1978 (see 43 FR 6952, 50442, 54252, 44 FR 11072).

43 FR 59388 (December 20, 1978) - Amendment to final regulations for surf clams; specifies amount of hours per week surf clams may be harvested for first quarter of 1979 (see 43 FR 6952, 44 FR 11071).

43 FR 59507 (December 21, 1978) - Final regulations; imposes 20-percent surcharge on all 1979 foreign fishing fees paid, capitalizing Fishing Vessel and Gear Damage Compensation Fund (see 43 FR 33776, 50928, 57148, 60171).

43 FR 59845 (December 22, 1978) - Amendment to PMP for Squid Fisheries of the Northwestern Atlantic; increases TALFF (see 43 FR 31183, 31186, 35719, 55809).

43 FR 60171 (December 26, 1978) - Amendment to foreign fishing regulations; extension of payment period for poundage fees and surcharge on all fees paid for foreign fishing for 1979 (see 43 FR 57148, 59507).

43 FR 60474 (December 28, 1978) - Approval of FMP for Atlantic Herring Fishery of the Northwestern Atlantic; promulgation of emergency regulations for implementation of FMP (see 44 FR 7711, 16018, 18508).

43 FR 60930 (December 29, 1978) - Final regulation for 1978 quarterly reports by foreign vessels operating in the Northwest Atlantic Ocean (see 42 FR 45551, 43 FR 51053, 59292, 44 FR 6761).

44 FR 885 (January 3, 1979) - Final regulations for Atlantic groundfish (cod, haddock, and yellowtail flounder) and implementation of FMP for Atlantic Groundfish as amended for a fishing year commencing October 1, 1978 (see 43 FR 45872, 53040, 55411, 44 FR 2397, 6732, 16017).

44 FR 1113 (January 4, 1979) - Definition of activities that will be presumed to constitute harassment of humpback whales under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973 in waters adjacent to the islands of the State of Hawaii (see 43 FR 25349).

44 FR 1115 (January 4, 1979) - Extension of effective date of FMP for Commercial Tanner Crab off the Coast of Alaska and regulations implementing FMP from 12/31/78 to 10/31/79 (see 43 FR 21170, 21180, 52034, 54964, 57149, 59075, 44 FR 5168, 5885, 15503, 18511).

44 FR 2397 (January 11, 1979) - Correction to 44 FR 885.

44 FR 2547 (January 11, 1979) - Determination of Alaska waiver request regarding regulations governing the taking of certain Alaska marine mammals (see 41 FR 15166, 15173).

44 FR 4684 (January 23, 1979) - Final regulations on the apportionment of reserve amounts of fish available to foreign fishing in accordance with FMP for Groundfish of the Gulf of Alaska (see 43 FR 46349, 56238, 44 FR 18028, 18539).

44 FR 5168 (January 25, 1979) - Approval of amendments to FMP for tanner crabs off Alaska and proposed regulations (see 43 FR 21170, 57149, 59075, 59292, 44 FR 1115, 5885, 15503, 18511).

44 FR 5885 (January 30, 1979) - Closure of Southern District of Cook Inlet Registration Area to fishing for tanner crabs by U.S. vessels, in accordance with FMP for tanner crab off Alaska (see 43 FR 57419).

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44 FR 5916 (January 30, 1979) - Proposed rules to implement 1979 management program establishing a quota for taking Bering Sea stock of bowhead whales by native (Indian, Aleut, or Eskimo) subsistence whalers of 18 landed or 27 struck, whichever occurs first (see 44 FR 9608).

44 FR 6732 (February 2, 1979) - Final regulations on quarterly quotas for Atlantic groundfish (cod, haddock, and yellowtail flounder) and notice of fishery closure and adjustment of catch limitation (see 44 FR 885, 2397, 16017).

44 FR 6761 (February 2, 1979) - Proposed amendment to 1979 foreign fishing regulations restricting foreign vessel operations in authorized fishing area in the Atlantic from fishing within 2 nautical miles of reported gear areas (see 42 FR 60694, 43 FR 51053, 59292).

44 FR 7708 (February 7, 1979) - Interim final regulations on guidelines for development of FMPs (see 43 FR 49023).

44 FR 7711 (February 7, 1979) - Repromulgation of emergency regulations implementing FMP for Atlantic herring (see 43 FR 60474, 44 FR 16018, 17186, 18508).

44 FR 7777 (February 7, 1979) - Proposed regulations for endangered species exemptions.

44 FR 8905 (February 12, 1979) - Proposed regulations to implement Section 10 of the Fishermen's Protective Act of 1967 (see 43 FR 20255, 45869).

44 FR 9608 (February 14, 1979) - Correction to 44 FR 5916.

44 FR 11071 (February 27, 1979) - Notice of increase of fishing time for surf clams; increases allowable fishing time for vessels in the U.S. FCZ to 36 hours per week for first quarter of 1979 (see 43 FR 6956, 59388).

44 FR 11072 (February 27, 1979) - Notice of adjustment of surf clam quota for first quarter of 1979; 50,000 bushel reduction (see 43 FR 6952, 50442, 54252, 59388).

44 FR 11573 (March 1, 1979) - Notice of availability of draft EIS and FMP for Precious Coral Fisheries of the Western Pacific.

44 FR 15503 (March 14, 1979) - Final regulations and amendments to FMP for tanner crabs off Alaska (see 43 FR 10566, 21170, 29127, 52034, 54964, 57149, 59075, 44 FR 1115, 5168, 5885, 15503, 18511).

44 FR 15726 (March 15, 1979) - Modification of foreign fishing regulations regarding foreign vessels recording and reporting catch data (see 43 FR 59292, 44 FR 18508).

44 FR 16017 (March 16, 1979) - Notice of reopening Atlantic groundfish (cod, haddock, and yellowtail flounder) fisheries and subsequent annual closure; establishment of catch limitation; correction to 44 FR 885 (see 44 FR 6732).

44 FR 16018 (March 16, 1979) - Closure of fishery for Atlantic herring in Gulf of Maine (see 43 FR 60474, 44 FR 7711, 17186, 18508).

44 FR 17184 (March 21, 1979) - Miscellaneous corrections to foreign fishing regulations (see 43 FR 59292).

44 FR 17186 (March 21, 1979) - Final regulations and implementation of FMP for Atlantic Herring Fishery of the Northwestern Atlantic (see 43 FR 60474, 44 FR 7711, 16018, 18508).

44 FR 17199 (March 21, 1979) - Supplemental public comment period on amendment to FMP for northern anchovy (see 43 FR 31191, 40868).

44 FR 17710 (March 23, 1979) - Final ruling designating waters adjacent to Sandy Point Beach, St. Croix, U.S. Virgin Islands as critical habitat for leatherback sea turtle (see 43 FR 55806).

44 FR 18028 (March 26, 1979) - Final regulations on the apportionment of reserve amounts of fish available to foreign fishing in accordance with FMP for Groundfish of the Gulf of Alaska (see 43 FR 46349, 56238, 44 FR 4684, 18539).

44 FR 18031 (March 26, 1979) - Approval of FMP for Stone Crab Fishery; emergency regulations implementating portions of the plan.

44 FR 18508 (March 28, 1979) - Correction to 44 FR 15726.

44 FR 18508 (March 28, 1979) - Emergency regulations implementing amendment to FMP for Atlantic herring changing statistical procedures (see 43 FR 60474, 44 FR 7711, 16018, 17168).

44 FR 18511 (March 28, 1979) - Final regulation closing the portion of the Kodiak District of Registration Area J (westward) to fishing of tanner crab by U.S. vessels (see 43 FR 10566, 21170, 29127, 52034, 54964, 57149, 59075, 44 FR 1115 5168, 5885, 15503).

44 FR 18539 (March 28, 1979) - Proposed amendments to FMP for Atlantic Groundfish (cod, haddock, and yellowtail flounder) changing OY for final quarter of 1978-79 fishing year (see 43 FR 46349, 56238, 44 FR 4648, 18028).

* * * *

ANADROMOUS SPECIES. These are species of fish that mature in the ocean, and then ascend streams to spawn in freshwater. In the FCMA, these species include, but are not limited to, Atlantic and Pacific salmons, steelhead trout, and striped bass. See 42 FR 60682, Nov. 28, 1977.

BOAT, OTHER. Commercial fishing craft not powered by a motor, e.g., rowboat or sailboat, having a capacity of less than 5 net tons. See motorboat.

BREADED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a non-leavened mixture containing cereal products, flavorings, and other ingredients. Breaded products are sold raw or partially cooked.

BATTER-COATED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a batter containing a leavening agent and mixture of cereal products, flavoring, and other ingredients, and partially cooked in hot oil a short time to expand and set the batter.

BREADED SHRIMP. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last shell segment; also known as portions, sticks, steaks, etc., when prepared from a composite unit of two or more shrimp pieces, whole shrimp, or a combination of both without fins or shells.

BUTTERFLY FILLET. Two skin-on fillets of a fish joined together by the belly skin. See fillets.

CANNED FISHERY PRODUCTS. Fish, shellfish, or other aquatic animals packed in cans, jars, or other containers, which are hermetically sealed and heat-sterilized. Canned fishery products may include milk, vegetables, or other products. Most, but not all, canned fishery products can be stored at room temperature for an indefinite time without spoiling.

COMMERCIAL FISHERMAN. An individual who derives income from catching and selling living resources taken from inland or marine waters.

CONSUMPTION OF EDIBLE FISHERY PRODUCTS. Estimated amount of commercially landed fish, shellfish, and other aquatic animals consumed by the civilian population of the United States. Estimates are on an edible-weight basis and have been adjusted for beginning and ending inventories of edible fishery products. Consumption includes U.S. production of fishery products from both domestically caught and imported fish, shellfish, and other edible aquatic plants and animals; and excludes exports and purchases by the U.S. Armed Forces.

CONTINENTAL SHELF FISHERY RESOURCES. These are living organisms of any sedentary species that are at the harvestable stage either (a) immobile on or under the seabed or (b) unable to move except in constant physical contact with the seabed or subsoil of the continental shelf. Presently, the FMCA lists them as certain abalones, surf clam and ocean quahog, queen conch, Atlantic deep-sea red crab, dungeness crab, stone crab, king crabs, snow (tanner) crabs, American lobster, certain corals, and sponges.

CURED FISHERY PRODUCTS. Products preserved by drying, pickling, salting, and smoking. Does not include canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine); smoked products are cured with smoke or a combination of smoking and drying or salting.

EUROPEAN ECONOMIC COMMUNITY (EEC). Belgium and Luxembourg, Denmark, Federal Republic of Germany, France, Ireland, Italy, Netherlands, and United Kingdom.

EXVESSEL PRICE. Price received at the dock for fish, shellfish, and other aquatic plants and animals.

FISH BLOCKS. Regular fish blocks are frozen blocks or slabs of fillets or pieces of fillets cut or sliced from fish. Minced fish blocks are frozen blocks or slabs of minced flesh produced by a meat and bone separating machine.

FISH FILLETS. The sides of fish that are either skinned or have the skin on, cut lengthwise from the backbone. Most types of fillets are boneless or virtually boneless; some may be labeled as "boneless fillets."

FISH MEAL. A high protein animal feed supplement made by cooking, pressing, drying, and grinding fish or shellfish.

FISH OIL. An oil extracted from body (body oil) or liver (liver oil) of fish and marine mammals; mostly a byproduct of fish meal production.

FISH PORTION. A piece of fish flesh generally of uniform size with a thickness of 3/8 of an inch or more and differs from a fish stick in being wider or of a different shape. A fish portion is generally cut from a fish block.

FISH SOLUBLES. A water-soluble protein byproduct of fish meal production. Fish solubles are generally condensed to 50 percent solids and marketed as "condensed fish solubles."

FISH STEAK. Cross-section slices cut from large dressed fish. Steaks are usually about 3/4 of an inch thick.

GLOSSARY

FISH STICK. An elongated piece of breaded fish flesh weighing not less than 3/4 of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next larger dimension. A fish stick is generally cut from a fish block.

FISHING CRAFT, COMMERCIAL. Boats and vessels engaged in capturing fish, shellfish, and other aquatic plants and animals for sale.

FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976, Public Law 94-265 (FCMA). The FCMA became law on April 13, 1976, and was put in force March 1, 1977. The Act provides a national program for the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. The FCMA established the U.S. Fishery Conservation Zone (FCZ) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. FCZ, the United States has exclusive management authority over all fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Act provides further exclusive management authority beyond the U.S. FCZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

FISHERY MANAGEMENT PLAN (FMP). A plan developed by a Regional Fishery Management Council to manage a fishery resource pursuant to the FCMA.

FULL-TIME COMMERCIAL FISHERMEN. An individual who spends 50 percent or more of the working year in commercial fishing activities, including port activity, such as vessel repair, and re-rigging.

GROSS REGISTERED TONNAGE (GRT). The gross registered tonnage of a vessel is the internal cubic capacity of all space in and on the vessel that is permanently enclosed, with the exception of certain permissible exemptions. GRT is expressed in tons of 100 cubic feet.

GROUNDFISH. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In import statistics shown in "Fisheries of the United States," the term applies to the following species: cod, cusk, haddock, hake, pollock, and Atlantic ocean perch.

INDUSTRIAL FISHERY PRODUCTS. Items processed from fish, shellfish, or other aquatic plants and animals that are not consumed directly by humans. These items contain products from seaweeds, fish meal, fish oils, fish solubles, pearl essence, shark and other aquatic animal skins, and shells.

INTERNATIONAL CONVENTION FOR THE NORTHWEST ATLANTIC FISHERIES (ICNAF). This convention, which entered into force on July 3, 1950, was for the investigation, protection, and conservation of the fishery resources of the Northwest Atlantic Ocean. In 1975, there were 18 member nations. The United States withdrew from ICNAF on December 31, 1976, because continued adherence to the convention was deemed incompatible with the extension of U.S. fishery management jurisdictions to 200 miles under the Fishery Conservation and Management Act of 1976. See Northwest Atlantic Fisheries Organization (NAFO).

LANDINGS, COMMERCIAL. Quantities of fish, shellfish, and other aquatic plants and animals brought ashore and sold. Landings of fish may be in terms of round (live) weight or dressed weight. Landings of crustaceans are generally on a live-weight basis except for shrimp which may be on a heads-on or heads-off basis. Mollusks are generally landed with the shell on, but for some species only the meats are landed, such as sea scallops. Data for all mollusks are published on meat-weight basis.

MARINE RECREATIONAL CATCH. Quantities of finfish, shellfish, and other living aquatic organisms caught, but not necessarily brought ashore, by recreational marine anglers.

MARINE RECREATIONAL FISHING. Fishing for pleasure, amusement, relaxation, or home consumption. If part or all of the catch is sold, the monetary returns constitute an insignificant part of the person's income.

MARINE RECREATIONAL FISHING DAY. A day, or any part of a day, spent fishing for recreational purposes.

MARINE RECREATIONAL FISHING EXPENDITURES. Money spent for goods and services used primarily for recreational fishing. Include monies spent for: (1) food and lodging; (2) transportation; (3) auxiliary equipment, including boats and motors; (4) fishing equipment; (5) licenses, tags, and permits; and (6) privilege fees, including party and charter boat fees, and other miscellaneous items related directly to recreational fishing.

MARINE RECREATIONAL FISHERMEN. Those people who fish in marine waters primarily for recreational purposes. Their catch is primarily for home consumption, although occasionally a part or all of their catch may be sold and enter commercial channels.

MAXIMUM SUSTAINABLE YIELD (MSY). MSY from a fishery is the largest annual catch or yield in terms of weight of fish caught by both commercial and recreational fishermen that can be taken continuously from a stock under existing environmental conditions. A determination of MSY, which should be an estimate based upon the best scientific information available, is a biological measure necessary in the development of optimum yield.

NORTHWEST ATLANTIC FISHERIES ORGANIZATION (NAFO). This convention, which entered into force January 1, 1979, replaces ICNAF. NAFO provides a forum for continued multilateral scientific research and investigation of fishery resources of the northwest Atlantic. NAFO will manage fishery resources that occur beyond the limits of coastal nations fishery jurisdiction in the northwest Atlantic, and will ensure consistency between NAFO management measures in this area and those adopted by the coastal nations within the limits of their fishery jurisdiction. United States adherence to the NAFO Convention is anticipated in 1979.

MOTORBOAT. A motor-driven commercial fishing craft having a capacity of less than 5 net tons. See "boat, other."

OPTIMUM YIELD (OY). In the FCMA, OY with respect to the yield from a fishery, is the amount of fish that (1) will provide the greatest overall benefit to the United States, with particular reference to food production and recreational opportunities; and (2) is prescribed as such on the basis of maximum sustainable yield from such fishery, as modified by any relevant ecological, economic, or social factors.

PACKAGED FISH. A term used in NMFS publications prior to 1972 to designate fresh or frozen raw fish fillets, and steaks.

PART-TIME COMMERCIAL FISHERMAN. An individual who spends less than 50 percent of the working year in commercial fishing activities.

PER CAPITA CONSUMPTION. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilian resident population of the United States on July 1 of each year are used. These estimates are taken from current population reports, series P-25, published by the U.S. Bureau of the Census.

PER CAPITA USE. The use of all fishery products both edible and nonedible in the United States divided by the total population of the United States.

PRELIMINARY FISHERY MANAGEMENT PLAN (PMP). The Secretary of Commerce prepares a PMP whenever a foreign nation with whom the United States has made a Governing International Fishery Agreement (GIFA), submits an application to fish in a fishery, for which there is no fishery management plan (FMP). A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

RETAIL PRICE. The price of fish and shellfish sold to the final consumer by food stores and other retail outlets.

ROUND (LIVE) WEIGHT. The weight of fish, shellfish, or other aquatic plants and animals as taken from the water; the complete or full weight as caught. The tables on world catch found in this publication include, in the case of mollusks, the weight of both the shells and the meats, whereas the tables on U.S. landings include only the weight of the meats.

TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF). The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, shall be that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the FCMA.

U.S. FISHERY CONSERVATION ZONE (FCZ). The FCMA defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured.

U.S. TERRITORIAL SEA. A zone extending 3 nautical miles from shore for all States except Texas and the Gulf Coast of Florida where the seaward boundary is 3 marine leagues (9 nautical miles).

USE OF FISHERY PRODUCTS. Estimated disappearance of the total supply of fishery products both edible and nonedible on a round-weight basis without considering beginning or ending stocks, exports, military purchases, or shipments to U.S. territories.

VESSEL. A commercial fishing craft having a capacity of 5 net tons or more. These craft are either enrolled or documented by the U.S. Coast Guard and have an official number assigned by that agency.

WHOLESALE FISH AND SHELLFISH PRICES. Prices in this report generally are those received at principal fishery markets by primary wholesalers (processors, importers, and brokers) in customary quantities, free on board (f.o.b.) warehouse.

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Federal Inspection Marks For Fishery Products

FISHERY PRODUCTS ARE VOLUNTARILY INSPECTED. Beef and poultry, as well as many other perishable food items, are federally inspected and graded at various stages of processing to ensure buyers that the product is safe, wholesome, and acceptable. Fishery products have no similar mandatory Federal inspection program; however, the U.S. Department of Commerce (USDC) provides a voluntary inspection program for fishery products. Seafood processors, packers, brokers, and users who are interested in having USDC inspect their products may subscribe voluntarily to the program. Users of the service pay for USDC inspection which evaluates their raw materials, ensures the hygienic preparation of products, and certifies the final quality and condition of the product. The USDC inspector functions as an objective observer in evaluating processing techniques and product quality and condition. Products packed in plants under USDC inspection can carry marks for easy consumer indentification.

FEDERAL INSPECTION MARKS. Federal inspection marks are official marks approved by the Secretary of Commerce and authorized for use on brand labels of fishery products. When displayed on product labels, these marks signify that Federal inspectors of the Department of Commerce inspected, graded, and certified the products as having met all the requirements of inspection regulations, and have been produced in accordance with official U.S. grade standards or approved specifications.

WHAT DO THE INSPECTION MARKS MEAN? The distinctive inspection marks are symbols that signify two distinct but related functions in guiding the consumer to safe, wholesome products produced in a sanitary environment and packed in accordance with uniform quality standards under the supervision of the U.S. Department of Commerce's voluntary inspection service. The functions symbolized by each mark follow:

"U.S. GRADE" MARK. The "U.S. Grade" mark signifies that:

1. The product is clean, safe, and wholesome.
2. The product is of a specified quality, identified by the appropriate U.S. Grade designation, as determined by a Federal inspector in accordance with established requirements in U.S. Grade standards.
3. The product was produced in an acceptable establishment with proper equipment and in an appropriate processing environment as required by food control authorities.
4. The product was processed under supervision by Federal food inspectors and packed by sanitary food handlers in accordance with specific Good Manufacturing Practice requirements.

5. The product is truthfully and accurately labeled as to common or usual name, optional ingredients, and quantity.

"PACKED UNDER FEDERAL INSPECTION" MARK. "Packed Under Federal Inspection" may be displayed as an official mark or as an official statement on the product label. The mark or statement signifies that the properly labeled product is clean, safe, and wholesome and has been produced in an acceptable establishment with appropriate equipment under the supervision of Federal inspectors. The product has not been graded as to a specific quality level; rather, it is an acceptable commercial quality as determined by Federal inspectors in accordance with approved standards or specifications.

For Further Information

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9450 Koger Blvd.
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1700 Westlake Ave., North
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(206) 442-4327

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(907) 586-7221

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Washington, D.C. 20235

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Financial Assistance Services For Fishing Vessels

Two National Marine Fisheries Service programs are available for financing the construction and refurbishing of commercial fishing vessels and commercial passenger-carrying fishing vessels.

Fishing Vessel Obligation Guarantee Program is available for financing up to 87½ percent of the cost of constructing, reconstructing, or reconditioning fishing vessels of 5 net tons or over. Maturities of 15 to 20 years are available.

The long-term financing available under this program allows fishing vessel owners to stretch the debt service of their vessel construction or refurbishing costs over a period of time equal to the economically useful life of their vessel. Down payments are low and interest costs are reasonable.

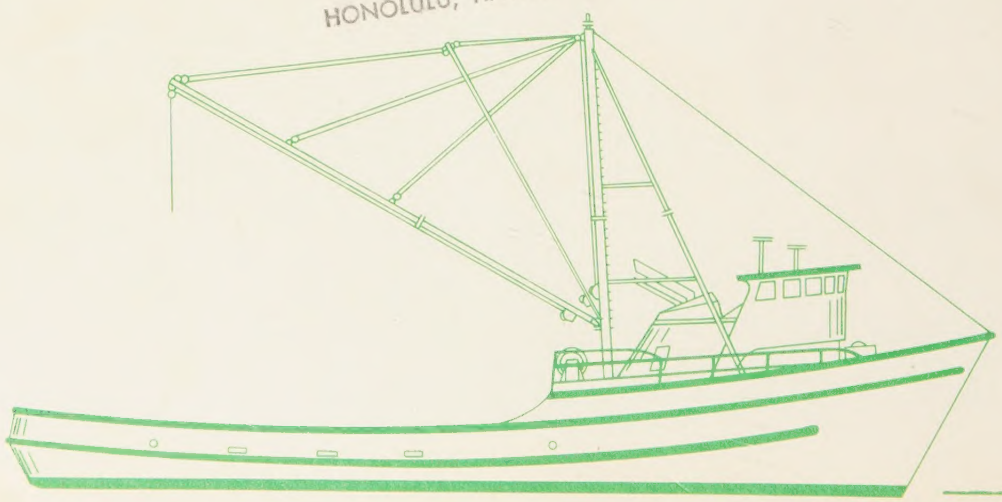
Fishing Vessel Capital Construction Fund Program allows fishing vessel owners to defer payment of Federal tax on any portion of income earned from the operation of fishing vessels of at least 2 net tons when that income is reserved for payment toward the cost of vessel construction or reconstruction.

This provides an interest-free loan from the U.S. Government equal to the Federal taxes which otherwise would have been paid on vessel income.

Deferred taxes are eventually repaid to the U.S. Government through a reduction in the depreciation allowed on vessels constructed or reconstructed with tax deferred funds. The "interest-free loan" character of the tax deferral, thus, continues through the depreciable life of the vessel.

This tax-deferral program compensates for vessel owner's general lack of access to the equity capital market by reducing the amount that must be initially borrowed from conventional sources to finance vessel construction or reconstruction.

LIBRARY
NATIONAL MARINE FISHERIES SERVICE
HONOLULU LABORATORY
P. O. BOX 3830
HONOLULU, HAWAII 96812



For Further Information

Contact one of the following Financial Services offices of the National Marine Fisheries Service, NOAA, U.S. Department of Commerce:

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Gloucester, MA 01930
(617) 281-3600

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NOAA--S/T 79-183